



## Members of the Board

Members of the Board of Trinity College Dublin during the 2009/10 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 Margaret O'Mahony

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

Professor Shane Allwright (2008-2012) Professor John McGilp (2008-2012) Professor Eunan O'Halpin (2008-2012) Dr Amanda Piesse (2005-2010) Professor Henry Rice (2007-2010) Dr Sinéad Ryan (2007-2010) Professor David Singleton (2008-2012) Professor Jagdish Vij (2006–2010)

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

Ms Mary Coffey (2009-2012) Mr William Dowling (2008-2012) Dr Eoin Mac Cárthaigh (2005-2010) Dr Anthony McElligott (2008-2010) Professor Des O'Neill (2008-2012)

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

Mr Peter Connell (2009-2010) Dr Kieran J McGinley (2008-2012) Ms Peggy Murphy (2008-2012)

#### **Student Representatives**

President Graduate Students' Union, Mr Ronan Hodson (2009-2010) President Students' Union, Mr Cónán Ó Broin (2009-2010) Education Officer Students' Union, Mr Ashley Cooke (2009-2010) Welfare Officer Students' Union, Mr Cormac Cashman (2009-2010)

#### **External members**

Mr Brian Sweeney, nominated by Trinity College Dublin (2005-2010) Ms Geraldine Clarke, nominated by the Minister for Education and Science (2005-2010)

## In Attendance Ex-Officio

Secretary, Ms Anne FitzGerald Treasurer, Mr Ian Mathews

This document is available in accessible format on request (email: communications@tcd.ie)



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## Introduction by the Provost



This Annual Report outlines the College's position and highlights our achievements during the academic year 2009/10 which was another very successful and productive year for the College. Key milestones include:

#### Strategic Plan 2009-2014

The *Strategic Plan 2009-14*, which was formulated through extensive consultation, builds on the College's achievements with a balanced approach to education, research and innovation. Launched in November 2009, it will strengthen Trinity's position as a university of global consequence.

Innovation in all facets of the College's activities is a key feature. The Strategic Plan sets out a new initiative for undergraduate education; it will transform graduate education with a new Innovation Academy; strengths in research and scholarship will be consolidated; and a new Open Innovation policy will be promoted for knowledge transfer to the best benefit of Ireland and the world. Ground-breaking new alliances are proposed, and Trinity will bring the importance of engagement with the local community and wider society to the fore.

Key goals to ensure TCD meets its strategic objectives include:

- Promoting education, research and innovation as mutually reinforcing components of the university's mission.
- Increasing opportunities to study at Trinity by increasing places by 15% to 18,000, while maintaining quality and the personal nature of the student-staff interaction.
- A new initiative in undergraduate education that:
  - Implements a new modularised core/elective curriculum with a balance of depth and breadth, allowing for greater student choice of new courses, degree programmes, and life-long learning:
  - Increases access of under-represented groups of students with talent and ability to 22% of new entrants;
  - Achieves a 90% completion rate in all undergraduate courses, in line with the best universities worldwide;
  - Strengthens the link with research and its spirit of enquiry and critical thinking.
- Transforming graduate education and skills provision to facilitate a more creative, innovative and entrepreneurial postgraduate.

- Consolidating and differentiating research strengths and scholarship, converging major themes of research around the realisation of a sustainable society.
- Pioneering a new open innovation policy to accelerate the development and value of intellectual property and enterprise and the incubation of new companies.
- Strengthening the alignment between research strengths, excellent teaching and knowledge transfer by the recruitment of a special cohort of new scholar/teachers who will seed this linkage and the achievement of critical mass.

To best meet these objectives the College is advancing key enabling initiatives, including delivery of three flagship collaborations: the TCD-UCD Innovation Alliance, the Trinity Academic Medical Centre, and the Creativity in the Community Programme.

#### Research & Innovation

Income to support funded research activity reached a level of €82 million for the year. Trinity staff members excelled in research achievements and received national and international distinction. In the course of the year, 12 new spin out companies were approved to commercialise intellectual property developed at Trinity, 20 patent applications were filed and 11 commercial licenses were issued.

#### Students

Trinity is fortunate in attracting intellectually strong students from Ireland and abroad. In 2009 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 2009/10, seven new postgraduate and eight new undergraduate courses commenced and 4,244 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 Staff Office provided a training and development service for all staff. Twenty-six New Blood Ussher Lectureships were approved using non-exchequer funding. This 'New Blood' programme is an important driver of the Strategic Plan 2009-14 as it facilitates Schools in delivering the various actions of the plan. Eighteen candidates were appointed by the end of the academic year.

#### Capital Development

The capital development programme on campus continued to thrive. A key development includes the most ambitious construction project in Trinity's history, the Trinity Biomedical Sciences Institute on Pearse Street. Among the completed projects were The Trinity Long Room Hub, the Boots Practice of Pharmacy Teaching and Development Unit, and the refurbishment of 7-9 South Leinster Street.

#### **Financial Position**

In 2010, funding pressures experienced at a national level resulted in a reduction in core funding on 2009 levels. However, despite the reduced funding envelope, the College ended the year on a solid financial platform due to the actions approved by Board along with the continued effort and commitment of the College community to adapt to a constantly changing and challenging funding environment.

The College is currently heavily reliant on exchequer sources of revenue and is expected to manage its financial affairs within the parameter of the Universities Act, 1997, deliver on its objectives in the absence of frameworks for multi-annual funding and manage financial resilience/renewal. In this context, the College is pursuing a financial strategy where income generation and diversification is promoted and motivated; cost management is supported by procurement; efficiency initiatives are prioritised and activity is managed within budgeted resources over the medium term.

The College has no accumulated recurrent deficit at the end of the 2009/10 academic year. The financial outturn for the year has been satisfactory and is attributable to sound financial planning. It is clear that the environment of steadily rising public funding has ended with the College facing a future that is demand-led and one that will have much less certainty and predictability, particularly Government sourced funding. However, it is an environment that will present many opportunities in terms of revenue generation and further efficiencies. The impact of funding reductions on the quality of College's outputs is a real concern and the priority of the Government must be the protection and preservation of resources to organisations that support and deliver on the national agenda of economic recovery. In these challenging times, it is essential however that College embraces opportunities going forward and continues to invest in capital and recurrent activities.

#### **International Standing**

Trinity was ranked in the top 50 world universities (43rd) and top 15 European universities (13th) by the Times Higher Education-QS world university rankings.

#### Conclusion

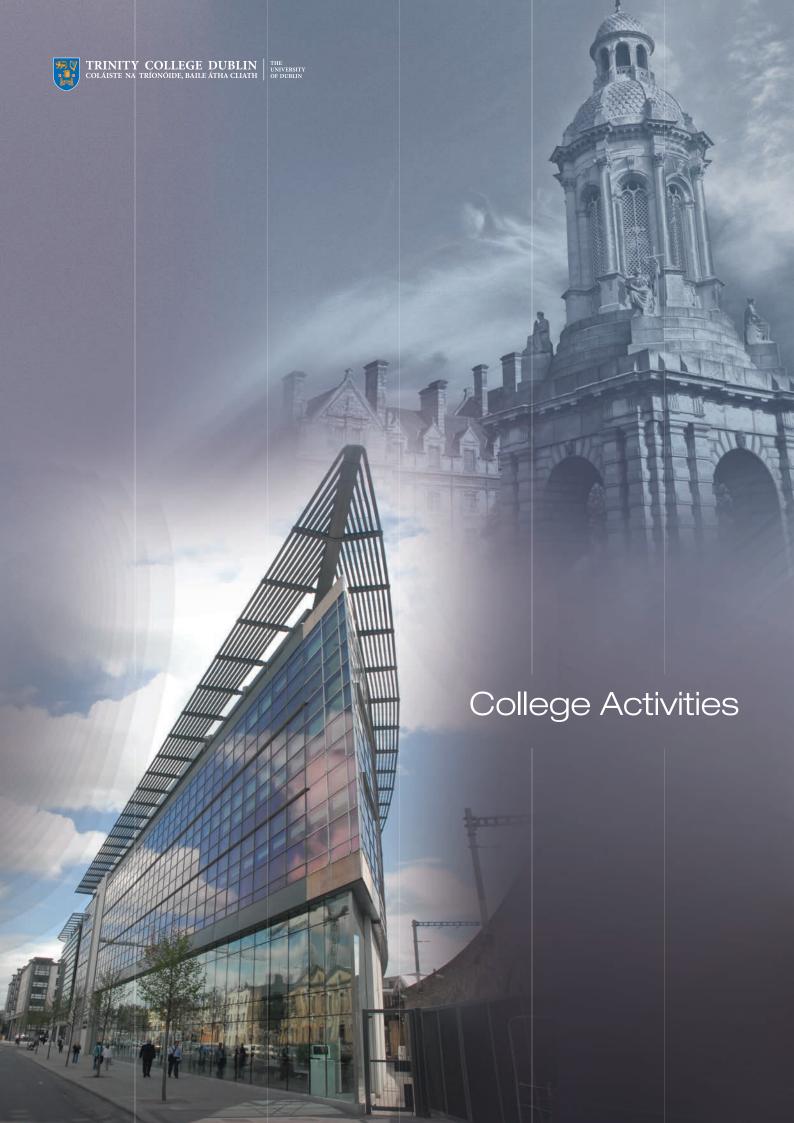
I wish to thank all the staff of the College, academic, administrative and support, for their part in our achievements during 2009/10 – these could not have been attained without their dedication throughout the year.

I would also like to thank the Taoiseach, the Minister for Education and Skills, the Minister for Health and Children 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.

As I near the end of my term of office as Provost, I would like to sincerely thank the many people who have given me unstinting support throughout my Provostship.

John Hegarty, Provost.

April 2011





## 1. Academic Developments

## 1.1 Times Higher Education-QS World University Rankings

Trinity College Dublin continued to climb the world university rankings, moving up to 43rd place in the 2009 Times Higher Education-QS World University Rankings. It was also ranked 13th place in Europe. This is the highest ranking the College has ever achieved, up six places on last year's ranking of 49. Trinity's arts and humanities were ranked 41st in the world.

The Times Higher Education-QS university rankings list the world's top 500 universities measured on peer review, number of citations per faculty member, ratio of students to staff and the number of international students and staff.

The College's continuing improvement in these world-wide university rankings illustrates ongoing international recognition from academics and employers as Ireland's premier university. Such high rankings are excellent accomplishments for a university in a small country, competing internationally with much better-resourced and larger 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, balanced and student-centred. The College is committed to maintaining the exceptional quality of its undergraduate and postgraduate degrees and research and a major component of Trinity's strength lies in the 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.

Twenty Fellows, including three Honorary Fellows: Professor of Cardiovascular Medicine, Ian Graham at Trinity College and consultant cardiologist at the Adelaide and Meath Hospital, Dublin Incorporating the National Children's Hospital in Tallaght; Dr Douglas R Green, Chair of Immunology at St Jude's Children's Research Hospital in Memphis, Tennessee; and Prof Frances Ruane, Director of the Economic and Social Research Institute and previously of Trinity College were announced on Trinity Monday 2010.

In 2009/10, the Quality Office facilitated the quality reviews of the School of Genetics & Microbiology, the School of Natural Sciences, the School of Nursing & Midwifery, and the School of Drama, Film & Music. The reports arising from these reviews were generally positive and provided constructive feedback to the Schools on their teaching/learning, research and strategic planning activities.



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 Academic Year Structure

A new academic year structure came into effect on 31 August 2009. It is based on two twelve week teaching terms punctuated with a study/reading week in week seven, and a third term dedicated to assessment and end-of-year examinations. Following discussions on the impact of the new term structure, the University Council approved the insertion of a third revision week between the end of the Hilary teaching term and the commencement of examinations in the 2010/11 academic year.

#### 1.4 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 is the educational centrepiece of the Innovation Alliance. It is a collaborative venture in PhD education that builds on existing resources and synergies between TCD and UCD. Its mission is to develop a new breed of creative graduate, expert in their discipline, with a thorough understanding of how innovation can convert knowledge and ideas rapidly into products, services and policies for economic and social benefit.

During the 2009/10 academic year, Stanford President Dr John L. Hennessy took on the role of the Alliance's first international advisor. This appointment is a hugely positive development and will be of great benefit, not only to students in the Innovation Academy, but also to current and future start-up companies.

Prof Paul Coughlan (TCD) and Prof Suzi Jarvis (UCD) were appointed as Course Co-Directors in the Innovation Academy. These are key academic leadership roles and will have primary responsibility for the joint Diploma/Certificate in Innovation and Entrepreneurship within the Innovation Academy.

On the occasion of the first anniversary of the Innovation Alliance in March 2010, both universities jointly announced a series of new, focused, Innovation Bursaries through a  $\in$ 2 million fund. To promote innovation and research in Trinity, ten fully-funded interdisciplinary PhD studentships were awarded on the theme of 'Sustainable Society'. The bursaries were awarded to interdisciplinary programmes from the Arts, Humanities, Psychology, Bioscience, Bioengineering, Computer Science, Physics and Clinical Medicine. Six Postdoctoral bursaries were also awarded to post-doctoral researchers on the same theme to assist them in establishing an independent research track.



## 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 16,807 registered undergraduate and postgraduate students in 2009/10. Of these, approximately 80% were from the island of Ireland, 11% from other EU countries, 4% from North or Central America, and 5% 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, and mature students. The new 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 2009, 15.5% of all CAO places were filled by non-traditional students. Forty two percent of these were mature students.

## 2.2 Admissions Statistics/Entrance Exhibitioners

In 2009, 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 58,652 pupils sat the Leaving Certificate in 2009. Of those that applied to the CAO 1,015 achieved 560 points or more and 43% of these students accepted a place in Trinity College.

A total of 441 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 students represented 234 schools from 29 counties in Ireland as well as from other EU schools.



Entrance Exhibition Awardees, David McHugh and Ruaa El-Helali









School of Medicine students celebrate being awarded Scholarships on Trinity Monday 2010

## 2.3 Scholarships

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 2009/10, eighty students were awarded these prestigious scholarships on Trinity Monday 2010.

Recipients of the scholarships represented all faculties: the Faculty of Arts, Humanities and Social Sciences (24); Faculty of Engineering, Mathematics and Science (19); Faculty of Health Sciences (30); and Multi-Faculty (7).

## 2.4 The Curriculum – New Undergraduate and Postgraduate Courses

The following courses commenced at the beginning of the 2009/10 academic year:

Undergraduate Degree		Postgraduate Degree
B.A. Ancient and Medieval LL.B. Law and Business LL.B. Law and Political Scien Bachelor in Deaf Studies B.Sc. Human Health and Di B.A. Earth Sciences B.A. Business and Computi B.A. Political Science and G	nce isease ing	M.Sc. in International Management M.Phil. in European Studies M.Sc. in Advance Radiotherapy Practice M.Sc. in Cancer Care M.Sc. in Environment and Development M.Phil. in Irish Film, Music and Theatre M.Sc. in Respiratory Physiotherapy



Engagement with the Bologna process continued. A College-wide project to draft and publish formal statements of student learning outcomes for all undergraduate and postgraduate programmes, which had begun in 2008/09, continued throughout the 2009/10 academic year. All completed sets of learning outcomes for the 2010/11 academic year will be published during Michaelmas Term 2010.

The University Council in June 2010 agreed that higher level mathematics in the Leaving Certificate should carry a weighting of 140% to recognise the extra work effort required by students taking this subject. Since that Council meeting and decision, a sectoral position was reached through the IUA: each passing grade achieved at higher level mathematics in the Leaving Certificate should attract an additional 25 points, irrespective of an applicant's programme of choice. This scheme is due for implementation in 2012.

#### 2.5 Commencements, Firsts and Gold Medal Awards

A total of 4,244 degrees were conferred (2,652 primary degrees and 1,592 higher degrees) in 30 separate Commencement ceremonies in 2009. Three hundred and sixty students received first class honors at the degree examinations in 2009/10 and, of these, 72 were awarded Gold Medals.



Honorary Degrees recipients Paul Durcan (standing), Michael Griffith, Geraldine Kennedy and Ismail Serageldin

Honorary conferring took place at the Commencement ceremonies on 14 December 2009 and 2 July 2010. At the Winter Commencements, Paul Durcan, Michael Griffith, Geraldine Kennedy and Ismail Serageldin were honoured. Recipients of honorary degrees at the Summer Commencements were Kristina M. Johnson, Mohamed ElBaradei and Lynne Parker.





Second level students participating in the TAP Summer School 2010

## 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 under-represented 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 114 admissions to Trinity College through the Trinity Access Programmes in 2009/10. 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 2009/10, such as the Maths and Science Scholars Programme for 6th class pupils, the Med Day for Junior Cycle students, and Summer Schools.









Dr Jacqueline Hayden, Dr Eleanor Denny, Dr Christine Morris, Dr Michael Lyons (representing Prof John Kelly) and Prof Paul Coughlan, recipients of the Provost's Teaching Awards 2010

## 2.7 Provost's Teaching Awards

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

Recipients in 2010 were: Prof John Kelly, School of Chemistry (Lifetime Achievement Award), Dr Eleanor Denny, School of Social Sciences and Philosophy (Early Career Award), Dr Jacqueline Hayden, School of Social Sciences and Philosophy (Early Career Award), Prof Paul Coughlan, School of Business and Dr Christine Morris, School of Histories and Humanities . 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. Education at Trinity is distinctive in being research-led, balanced and student-centred.

## 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 2009/10, students and student societies were successful in many areas.

Trinity College's student societies beat off competition from 14 other colleges throughout Ireland to win four out of the eight categories they were nominated in at the annual Board of Irish College Societies (BICS) awards in April 2010. The DU Players were successful in three categories and won the top award for 'Best Society in a Large College Award'. Ross Dungan of DU Players was awarded 'Best Individual in a Large College' and the award for 'Best Event in a Large College' went to DU Players and the Comedy Society for the 'Trinity Fringe Festival'. The St Vincent de Paul Society also won the 'Best Civic Contribution in a Large College' award.



For the fourth year in a row The Historical Society's debating team won *The Irish Times* Debating Competition in February, the 50th anniversary of the event with team members Niamh Ní Mhaoileoin and Niall Sherry. The competition, which is Ireland's biggest and most prestigious debating contest is open to students in higher education in both the Republic of Ireland and Northern Ireland.

Three School of Engineering students, Triona Byrne, Helen Fletcher and Kate Gillen, were among a group of ten students nationwide to win the 2009 Science Foundation Ireland (SFI)/ Dell Young Women in Engineering Scholarship Awards. The awards aim to encourage more female students into engineering at undergraduate degree level and a future career.

A team of students studying for the MSc in Finance were awarded first prize in the Chartered Financial Analyst (CFA) Global Investment Research Challenge in February 2010. The Trinity students, Conor Maguire, Robert Skelton, Andreas Schmid and Mason Chesla, were one of six teams that made it to the final.

School of English student Fionnuala Barrett won the 2010 international Emory Elliott Memorial Prize, organised by the *Literary Encyclopedia*, for her essay on the subject of Jonathan Swift.

Economics PhD student Ben Elsner was awarded one of three Fondazione Eni Enrico Mattei (FEEM) awards at the Annual Congress of the European Economic Association (EEA) for his paper on the topic of emigration.

Postgraduate student Kevin Moerman of the Trinity Centre for Bioengineering was awarded the 2010 Engineers Ireland Biomedical Research Medal for his significant contribution to the field of biomedical engineering research.

School of Mathematics student, Christopher Blair was one of nine students nationwide awarded with the Hamilton prize for his achievement in Mathematics during his third year of study. The Hamilton prize was established to mark the best undergraduate mathematics students in the country.

Trinity College undergraduate students received 13 of the 41 gold medals at the Undergraduate Awards of Ireland presented by President McAleese in October 2009. The awards, which are open to undergraduates from Irish universities, aim to recognise and reward Ireland's most innovative young minds.

The works of William Shakespeare took centre stage in Dublin city centre in June 2010 during the Trinity College Dublin Shakespeare Festival. Organised by the Dublin University Players, there were over 45 free performances around the city in various locations such as St Stephen's Green, the Irish Botanical Gardens and Christchurch Cathedral with a headline act each night in Trinity's Front Square.

A total of 15 student sportsmen and women from a variety of clubs were awarded with the University Colours in 2010. The Trinity Pink, designed to correspond to the Light Blue of Cambridge and the Dark Blue of Oxford, is awarded on individual merit which is generally assessed in terms of outstanding club performance, representative selection or external achievement.





## 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 interdisciplinarity 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

In 2009/10, Trinity was very successful in securing funding for research activities. Income to support funded research activity reached a level of €82 million for the year, representing a 9% decrease on the 2008/09 figure of €89.7 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.

Over the last number of years, there has been a shift in sources of research funds away from EU/foreign sources to Irish sources largely driven by Science Foundation Ireland and HEA-funded PRTLI initiatives. There were 1,753 active research accounts and research activity supported 1,574 individuals in 2009/10.

Source of Research Activity (Income) Funding	Year ended 30 Sept 2010
Science Foundation Ireland Enterprise Ireland/Bioresearch Ireland/PATS Higher Education Authority Commission of the European Communities	38% 4% 6% 10%
Others	42%



## 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 2009/10:

#### Advanced Microscopy Laboratory

A world class nanoscience research facility, the Centre for Research on Adaptive Nanostructures and Nanodevices Advanced Microscopy Laboratory (CRANN AML), which features some of the world's most powerful microscopes, allowing material to be viewed at the atomic scale was opened in April 2010. This new €12 million, 6,000 sq.ft. facility will allow Ireland to compete globally to win new research funding and foreign direct investment that previously would have been beyond our capability. Importantly, it will also provide direct value to indigenous companies working in the medical device, ICT and pharmaceutical sectors. The CRANN AML was jointly funded by the HEA, through PRTLI 4 funding awarded to the INSPIRE consortium, and Science Foundation Ireland.

#### Living with Dementia Programme

Living with Dementia (LiD), a social research programme in dementia care that aims to tackle the marginalisation of people with dementia, enhance service provision, impact on policy development and improve the quality of life for those diagnosed with Alzheimer's disease and related dementias was officially launched in April 2010. Based in the School of Social Work and Social Policy, LiD is part of the Dementia Services Information and Development Centre at St James's Hospital. It is funded by The Atlantic Philanthropies.

#### **Eurolife International Health Alliance**

The Eurolife Network of European Universities in Life Sciences announced a new initiative in the fight against poverty related diseases – the Eurolife International Health Alliance (EIHA). This brings together the expertise of seven of Europe's leading universities, under the chairmanship of Prof Dermot Kelleher, Vice-Provost of Medical Affairs, TCD in an alliance aimed at promoting improved health for the most under-privileged around the world.



#### 4.4 Research Links with Other Institutions

Among the research links with other institutions formed during the 2009/10 academic year were:

#### First Ecar Trial Programme for Ireland

Ireland's first ecar trial-project conducted by the School of Engineering on behalf of ESB was announced in May 2010. Professor of Civil Engineering, Margaret O'Mahony will lead her research team in observing how households use the electric vehicles in terms of travel patterns, recharging and the resulting environmental impacts. Further project goals will be to provide policy guidance to the State, estimate the potential market penetration of electric vehicles, find solutions to implementation problems, manage environmental impact research questions and examine commercialisation issues for electric vehicles.

#### **HEALTHY FUTURES**

HEALTHY FUTURES, a Trinity led international research programme into environmental change and health in Eastern Africa, was awarded a €3.4 million grant under the Environment and Health Sub-activity of the European Union's Framework 7 Programme. Led by Prof David Taylor, School of Natural Sciences, the research consortium involves Europe and Africa-based researchers in 15 institutions and seeks to better understand links between environmental, including climate, changes and outbreaks of water-related, vector-borne diseases in Africa.

#### New Strategic Partnership between TCD and the ESRI

Trinity College and the Economic and Social Research Institute (ESRI) agreed a new strategic partnership which will enable both institutions to build collaborative and complementary strengths in the social sciences. One of the first initiatives under the new alliance will be the establishment of the Irish Centre for Longitudinal Research. This Centre will combine the expertise in both institutions, and provide opportunities for developing joint research projects and for training graduate students and other researchers in the associated methodologies.

#### Trinity and National Rehabilitation Hospital

Trinity College Dublin and the National Rehabilitation Hospital, Dun Laoghaire established a new partnership which will enable both institutions to cooperate in teaching and research, and provide undergraduate and postgraduate training and education in medicine. Through this new partnership, the National Rehabilitation Hospital will be affiliated to Trinity as a clinical teaching centre for students of the School of Medicine. Clinical placements for undergraduate students will also be offered at the National Rehabilitation Hospital in specialised areas provided at the hospital.

#### TRIL Announces GE Healthcare as New Industry Partner

The Technology Research for Independent Living (TRIL) Centre announced GE Healthcare as a new industry partner in April 2010. The addition of GE Healthcare will help TRIL to extend and expand its research programme for developing new technologies for independent living. TRIL is a groundbreaking research initiative set up to explore the physical, cognitive and social consequences of ageing and design technologies to help address them. The TRIL Centre is a partnership between co-founders Intel Corporation and the IDA Ireland, and academic partners Trinity College Dublin, UCD and NUI Galway.



#### New partnership for Teacher Education

In May 2010 Trinity announced a new partnership for teacher education with its Associated Colleges, Marino Institute of Education and the Church of Ireland College of Education. The new partnership, in keeping with best practice in teacher education and curriculum innovation, will develop a more integrated approach to theory and practice in teacher education and will further enhance the student experience. The two Associated Colleges of Education will have autonomy and control over the teaching and organisation of their own undergraduate programmes providing for greater flexibility and individuality in their delivery. The new partnership also provides for greater collaboration between TCD and its Associated Colleges in relation to postgraduate education and research.

## TCD and QUB Early Irish Fiction Research Project

The 'Early Irish Fiction' project is a collaborative research project between the School of English, Trinity College Dublin and the School of English, Queen's University Belfast which oversees the publication of a series of critical editions of fictional texts designed for scholars and students of Irish writing in English and for all those concerned with Ireland during the period 1680 -1820. The first two volumes of a new series of edited texts as part of the 'Early Irish Fiction, c.1680 - c.1820' series were launched in March 2010.

#### Trinity's School of Medicine and University of Michigan

A new academic collaboration between Trinity's School of Medicine and the Department of Molecular and Integrative Physiology at the University of Michigan will enable both institutions to develop their respective academic strengths and research strategies. The collaboration will enable PhD students and post-doctoral fellows from both universities to conduct research at the partner institution as part of their training, facilitating the pooling of intellect and the creation of centres of excellence in the international arena.

#### **Chemical Biology Consortium**

Trinity College became the first European institution to join as an official member of the National Cancer Institute's Chemical Biology Consortium in October 2009. The Chemical Biology Consortium (CBC) is an innovative international development that aims to bridge the gap between basic scientific investigation and clinical research, in order to bring new drugs to the clinic for the cancer patient. The CBC involves chemical biologists, translational scientists, molecular oncologists, screening centres from government, industry, and academia with specific skills and expertise to address unmet needs in therapeutic oncology. As a member of the CBC, Trinity will contribute to a "team science" based accelerated cancer drug discovery effort from target identification, high throughput screening, all the way through clinical trials.





## 4.5 Scholarship and Award Success

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

€102.5 million in funding for Trinity research programmes (€81.9 million under the Government's Programme for Research in Third Level Institutions (PRTLI) Cycle 5 and €20.6 million in matching funds). Seventeen of Trinity's submitted proposals to PRTLI 5 were successful. Among the major projects for which Trinity received funding are: The Trinity Biomedical Sciences Institute on Pearse Street which was awarded €55.4 million; and €20 million for structured PhD programmes and the flagship TCD-UCD Innovation Academy. These structured PhD programmes will create 100 research positions and research platforms, partnerships and innovation models across a range of disciplines, including science and engineering, social sciences, and the arts and humanities.



New RIA members Prof John Boland, Prof Timothy Foster, Prof Jane Grimson and Prof James Whiston with RIA President Prof Nicholas Canny (second from left)

The Royal Irish Academy enrolled four Trinity College academics as new members in 2010. The new members include Prof John Boland, Professor of Chemistry and Director of CRANN; Prof Timothy Foster, Professor of Molecular Microbiology; Prof Jane Grimson, Professor of Computer Science and founding member of the TCD's Centre for Health Informatics; and Prof James Whiston, Associate Professor of Spanish. Election to the Royal Irish Academy (RIA) is the highest academic honour in Ireland and is a public recognition of academic achievement.

Over €7 million in funding was secured by six Trinity research projects under the Science Foundation Ireland's Principal Investigator Programme in April 2010. The successful groundbreaking research projects were led by Prof Nick Campbell, Prof Ailbhe Ni Chasaide and Dr Christer Gobl, School of Linguistic, Speech and Communication Sciences; Prof Dan Bradley, School of Genetics and Microbiology; Prof Martin Hegner, School of Physics and CRANN; Dr Ross McManus, School of Medicine; Dr Kevin Mitchell, School of Genetics and Microbiology; and Prof Mathias Senge, School of Chemistry.



Two Trinity researchers were each awarded a major European Research Council (ERC) Starter Grant of €1.5 million in 2010. They were: Dr Daniel Kelly, School of Engineering, and Principal Investigator at the Trinity Centre for Bioengineering and Prof Jonathan Coleman, School of Physics and Principal Investigator at CRANN. These awards are given to only 300 top scientists across Europe, less than 10% of those who apply.

Prof Luke O'Neill, School of Biochemistry and Immunology won the 2009 RDS *Irish Times* Boyle Medal for Scientific Excellence for his pioneering work on the molecular understanding of innate immunity and inflammatory diseases such as rheumatoid arthritis. Prof O'Neill was also announced as the winner of Science Foundation Ireland's inaugural SFI Researcher of the Year accolade.

TCD scientists based at the Institute of Molecular Medicine (IMM), School of Medicine, in collaboration with CRANN, are leading a pan-European team that has attracted funding worth approximately €12 million, to develop a cutting edge nanotechnology process which will enable the early and rapid diagnosis of most common cancer types. Through European Framework Programme 7 (EU-FP7) funding, the scientists aim to create advanced medical diagnostic devices, enabled by nanotechnology, specifically targeted at the diagnosis and treatment of cancer.

Ten Trinity College researchers were awarded over €1.8 million to support health related cutting-edge research projects under the Science Foundation Ireland Research Frontiers Programme. The awards aim to support internationally competitive, high quality exploratory research in higher education across the science, maths and engineering disciplines.

In March 2010 a number of Trinity researchers were successful in both the Irish Research Council for Science, Engineering and Technology (IRCSET) and the Irish Research Council for Humanities and Social Sciences (IRCHSS) funding schemes.

Prof Desmond O'Neill, School of Medicine won an *All Ireland Inspirational Life Award* in March 2010 for his inspirational leadership in engaging older people to lead active and fulfilling lives. The award, the first of its kind in Ireland, is designed to honour individuals, projects and organisations for leadership and achievement in enabling older people to realise their potential and in combating ageism.

Professor of International Macroeconomics, Philip Lane, School of Social Sciences and Philosophy and Institute for International Integration Studies was selected, with his co-writer, for the 2010 Bhagwati Award. This prize is given every two years for the best article published in the *Journal of International Economics* and the winner is selected by the Editorial Board of the Journal of International Economics.

Prof Charles Dorman, Professor of Microbiology and Head of the School of Genetics and Microbiology was elected a Fellow of the American Academy of Microbiology. The Academy, the honorific leadership group within the American Society for Microbiology and the world's oldest and largest life sciences organisation, elects fellows annually through a highly selective peer review process.







TCD Botanist, Dr Peter Wyse Jackson, School of Natural Sciences, was appointed President of the Missouri Botanical Garden, one of the oldest American botanical institutions. Dr Jackson, who has served as the director of the National Botanic Gardens of Ireland since 2005, was selected by the organisation's board for his wealth of horticulture and botanical experience as well as his understanding of the importance of sustainability and conservation.

Prof Brendan Kennelly, Fellow Emeritus and former Professor of Modern Literature at the School of English, was presented with the 2010 Irish PEN Award for Contribution to Irish Literature.

Associate Professor of English and poet Eiléan Ní Chuilleanáin was named the International winner of the prestigious Canada based Griffin Poetry Prize for her collection, The Sun-fish, in June 2010. Her collection was chosen from almost 400 entries received from 12 countries.

Prof Kevin O'Rourke, School of Social Sciences and Philosophy was awarded a €1.4 million grant in January 2010 to enable him to research the inter-relationships between trade, trade policy and the Great Depression. Prof O'Rourke was the first Irish-based researcher to receive a European Research Council (ERC) Advanced Investigator Grant.

Prof John Dillon, Emeritus Professor Greek, School of Histories and Humanities was elected a corresponding member of the Academy of Athens in June 2010, in recognition of his significant and original contribution to the study of Greek philosophy. He is one of the few foreigners, and the first Irish academic, to have received this singular honour.

Dr Susan Carpenter, School of Biochemistry and Immunology was awarded the Roche Researcher of the Year Award for her work on a new protein named TRIL which may play a role in alleviating central nervous system related disorders such as multiple sclerosis and Alzheimer's disease.

School of Engineering researcher Aidan Quilligan was the winner of the Judges' Award in the HEA's Making and Impact Competition for his research into 'Optimisation of Concrete Wind Turbine Towers'. The competition, which is open to researchers in any discipline, asks applicants to make submissions on the difference their research work could make to Irish life, the country as a whole or internationally.

Prof Colm O'Morain, Dean of the Faculty of Health Sciences and consultant gastroenterologist at the Adelaide and Meath Hospital, Dublin incorporating the National Children's Hospital, Tallaght (AMNCH), was elected President of the United European Gastroenterology Federation (UEGF) in December 2009.

Prof John Pethica, School of Physics and Principal Investigator in CRANN, was appointed Physical Sciences Secretary and Vice President of the Royal Society. The Royal Society is the world's oldest scientific academy in continuous existence, and has been at the forefront of enquiry and discovery since its foundation in 1660.

The Director of the Division of Radiation Therapy, School of Medicine, Mrs Mary Coffey, received the prestigious Emmanuel van der Schueren Award in recognition of her contribution to radiation oncology. Mrs Coffey has been instrumental in the education of radiation therapists worldwide, and was one of the founding members of the Radiation Therapists Committee of the European Society for Therapeutic Radiology and Oncology (ESTRO).



Prof Robbie Gilligan, Head of the School of Social Work and Social Policy was elected President of Childwatch International Research Network in May 2010. Childwatch International is a global, non-profit, nongovernmental network of 45 university level research institutions across six continents.

Prof Louis Brennan, School of Business was the first Irish researcher in the Social Sciences to have been awarded COST funding for his proposal on the emergence of Southern Multinationals. COST, an intergovernmental framework for European Cooperation in Science and Technology, awarded funding to three proposals selected from over 120 proposals received from across Europe.

Dr Denise Crossan, School of Business, established the Social Entrepreneurship Research Network in Ireland in 2009, and established the Social Entrepreneurship Speaker Series in association with the Trinity Entrepreneurial Society and Ashoka Ireland in 2010. Dr Crossan was appointed Chair of the Social Entrepreneurship Section in the Association of Researchers in Nonprofit and Voluntary Action (ARNOVA).

Four researchers were awarded funding under the new Science Foundation Ireland funded Starting Investigator Research Grant announced in October 2009. The successful TCD research fellows were Dr Emmanuelle Graciet, Genetics; Dr Roger Preston, Haematology; Dr Paul Eastham, Physics; and Dr Jean Fletcher, Biochemistry. The scheme will help 15 highly talented researchers at an early stage in their profession to progress towards a fully independent academic research career.

Prof Shane O'Mara, Director of the Trinity College Institute of Neuroscience was awarded Wellcome Trust funding to conduct research into the brain mechanisms underlying amnesia. Additionally a Senior Research Fellowship was awarded by the Wellcome Trust to Dr Colm Cunningham, a research lecturer in the School of Biochemistry and Immunology, for his research on delirium. Their research will result in inter-institutional collaborations with the hope of advancing treatments and diagnosis for conditions that result in cognitive decline.

Dr Conor Houghton, School of Mathematics was awarded a James S. McDonnell Foundation, USA grant for his research into a new area of study, mathematical neuroscience, which encompasses mathematics and neuroscience.

Dr Brian Coghlan, School of Computer Science and Statistics and his research team in collaboration with five European partners attracted European Framework Programme 7 funding worth €2.3 million to develop a new Internet-based software project called StratusLab which aims to enhance distributed computing infrastructures that allow research and higher education institutes from around the world to pool computing resources.

A new programme called *Neuroenhancement for Inequalities in Elder Lives (NIEL)*, that aims to help prevent dementia and cognitive impairment among older people by enhancing cognitive function through new combinations of brain stimulation, mental training and pharmaceuticals was awarded €2.5 million by The Atlantic Philanthropies. The initiative is led by Professor of Psychology, Ian Robertson in the Trinity College Institute of Neuroscience, in collaboration with Professor of Old Age Psychiatry and Consultant Psychiatrist at St. James's Hospital, Brian Lawlor.





The Centre for Women in Science & Engineering Research (WiSER) and Trinity's Science Gallery along with partner organisations across Europe, were awarded €2.75 million in EU Framework Programme 7 funding for a three-year project 'Towards Women in Science & Technology' (TWIST) in January 2010. TWIST, managed by Caroline Roughneen, Director of WiSER, and Lynn Scarff, Science Gallery, aims to raise awareness of the wide-ranging roles played by women in science, engineering and technology and highlight the importance of gender with science research.

Prof Igor Shvets, School of Physics won the Best in Class award at the 2009 Enterprise Ireland Industrial Technologies Commercialisation Awards. His research led to the successful commercialisation of a 3D imaging device that can measure skin damage and be used for both cosmetic and dermatological applications. The Best in Class award is made annually to a researcher who has shown both scientific excellence and an awareness of industry needs.

Trinity College's music library was presented with an Excellence Award by the International Association of Music Libraries. The music library was recognised as the most extensive collection of research materials in Ireland and includes open access libraries and collections of works by 20th century Irish composers as well as 16th century items and Irish folk music.









## 5. Innovation and Commercialisation

Trinity Research & Innovation (TR&I) actively supports Trinity's wider research portfolio. The unit promotes and manages the interface between TCD researchers, funding agencies and industry. It is also responsible for managing TCD's Intellectual Property, Technology Transfer and Innovation, Commercialisation and Entrepreneurship. In line with the Irish National Development Plan and the College's Strategic Plan, Trinity Research & Innovation seeks to promote the successful exploitation of new ideas incorporating new technologies.

Trinity Research & Innovation facilitates the interactions between the university, external agencies and industry, through four divisions: Research Development, Contracts, Technology Transfer and Entrepreneurship.

## 5.1 Research Funding and Intellectual Property

In the course of the 2009/10 academic year, 20 patents were filed, 11 commercialisation licences were granted and 12 spin-out companies were approved.

## 5.2 Entrepreneurship and Innovation

The Entrepreneurship section supported 35 postgraduates and researchers on the Entrepreneurship Programme.

The 2010 Trinity Innovation Award was presented to Creme Software Ltd, a spin-out company formed in 2005 which has grown to a team of 15 professionals and numbers among its customers the leading food companies of the world and regulatory agencies in Europe and America.



CEO of Creme Software, Cronan McNamara, Co-founder and Director of Creme, Audrey Crosbie and Provost, Dr John Hegarty



## 6. Human Resources

Trinity's Human Resource function, the Staff Office, 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 the Staff Office is structured into four main areas, namely Recruitment, Staff Planning and Payroll, Staff Relations and Staff Development.

## 6.1 Employment Control Framework

A modified employment control framework (ECF) was agreed for the education sector in January 2010 which provided for the application of the moratorium to third level institutions. Two of the main conditions of the framework were to maintain a balanced budget and to reduce the core funded headcount relative to the numbers employed at the end of December 2008.

Within the original version of the ECF those staff funded from 'self-financing courses' were included within the definition of core staff. The College made strong representation for change on the basis that any additional capacity created through non-exchequer funding could not be accommodated within the existing employment ceiling. In order to support and encourage Schools to remain entrepreneurial and innovative in identifying avenues of non exchequer revenue, it was essential that an alternate approach to the categorisation of funding was taken. This proved successful and the ECF was adjusted to allow for the reclassification of self-financing tuition fees under certain circumstances as a non-Exchequer funding source.

The College had been working to an estimated reduction of 6% in the baseline headcount for December 2010. In May the HEA advised the College that following a review of student and staff numbers and following conclusion of the discussions at the 2010 budget meetings, a minimum reduction of 115.5 posts (6.1%) in the College was required. Trinity's Planning Group has oversight of the headcount and closely monitors both headcount and staffing forecasts as part of its regular agenda. It should be noted that the ECF has impacted the quality of the College's activities and by its very nature is opportunistic in the suppression of posts which results in an unbalanced reduction across the College.

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



#### 6.2 Staff

Schools and areas entered another round of cost saving measures with the focus being placed on preserving those positions which are essential to the academic mission of the College. Where reductions in numbers occurred a knock on effect to the quality of the activities and services provided was inevitable. Staff of the College have contributed significantly to savings and their goodwill and cooperation has ensured that the impact of the ECF on College operations has been minimised.

#### **New Blood Posts**

In January 2010, the Vice-Provost / CAO announced a 'new blood' programme which was to be an important driver of the College Strategic Plan 2009-2014. The main purpose of the scheme is to facilitate Schools in delivering on the various actions of the plan, particularly those within the *Education* and *Knowledge Generation and Transfer* Chapters. A number of these posts are intended to be joint appointments in order to promote interdisciplinary activity both within and between Schools. The funding for these five year posts is derived from non-exchequer income sources.

Twenty-six New Blood Ussher Lectureships were approved for filling, of which ten were awarded to the Faculty of Arts, Humanities and Social Sciences, eight to the Faculty of Engineering, Mathematics and Science, four to the Faculty of Health Sciences and four are joint Faculty appointments. Eighteen candidates were appointed before the end of the academic year 2009/10.

#### **Chair Recruitment**

Three competitions were completed for the positions of Chair of Child and Adolescent Psychiatry (2009) (Adelaide and Meath Hospital, Dublin incorporating the National Children's Hospital and Health Service Executive), Professor of Nephrology / Consultant Nephrologist & General Physician (AMNCH), and Professor / Consultant Haematologist (Clinical & Laboratory), (St. James's Hospital). Six other competitions commenced to fill The Samuel Beckett Chair of Drama and Film Studies and the Chair of Cognitive Neurosciences of Ageing both based in the Faculty of Arts, Humanities and Social Sciences; two Chairs in the Faculty of Engineering, Mathematics and Sciences namely, the Erasmus Smith Chair of Mathematics and the Chair of Geology and Mineralogy; and a further two in the Faculty of Health Sciences: Professor of Palliative Medicine and the Gabriel Stokes Chair of Haematology.

## 7. New College Initiatives



Provost Dr John Hegarty, Edward Kemp, Director of RADA and Danielle Ryan of the Cathal Ryan Trust

#### There were several new initiatives in the College during the academic year 2009/10:

The Lir, Ireland's National Academy of Dramatic Art in Trinity College Dublin was announced in December 2009. The Academy is being developed in collaboration with the Cathal Ryan Trust in association with the Royal Academy of Dramatic Art (RADA), in London and will have the highest international standards in education and training for actors, directors, designers, playwrights, stage managers and technicians. It will provide three courses at undergraduate and postgraduate level, designed in Trinity's School of Drama, Film and Music by Prof Brian Singleton in association with RADA, from the 2011/12 academic year.

Creative Arts, Technologies and Culture (CATC), a major initiative to spearhead a dynamic new approach to the generation of new ideas, connectivity and programmes across the Arts and Sciences, and between the City and Trinity, was launched by Trinity in 2010. Drawing on the diverse strengths and expertise in the university, the unique cluster of cultural and performing arts institutions concentrated in Dublin city, and the range of existing and emerging creative industries, the initiative is forging a new porous network in education, research, creative practice and entrepreneurship, at the heart of the city in six flagship areas. They are creative writing, music composition, cultural heritage, creative technologies, visual arts, and dramatic arts.

Trinity College Dublin's first Irish Language Scheme under the Official Languages Act was launched by the Minister for Rural, Community and Gaeltacht affairs, Éamon Ó Cuív TD in February 2010.



The Irish Language Scheme 2010-2012 sets out a range of areas in which Trinity College is committed to improving bilingual services to staff, students and the wider public. They include staff training and recruitment, bilingual customer services, College websites and bilingual publications, media and information technology as well as the promotion of Irish as a living language on campus and in society in general. Trinity's Irish Language Student Residency Scheme where groups of Irish speaking students live in student accommodation will be further developed. Engagement with Irish language organisations, alumni and wider society in the Irish language will also be strengthened.

The Digital Communications Strategy Group (DCSG) was established in late 2009 to coordinate the various groups charged with the delivery of digital content and communication of same both inside and outside the College. The DCSG is responsible for delivering a component of the College's Information Strategy and online communications plan which in turn are key components of the College's Strategic Plan 2009-14. Digital Communications cut across all areas of College's strategic themes and therefore is a key enabler in realising the College's objectives. Examples of projects which fall under the DCSG's remit include a new Virtual Learning Environment (VLE), iTunes U content, podcasting and iTunes U infrastructure, social networking (teaching and learning), social networking (general), mobile web, CampusM, and a Content Management System (CMS).

A review of existing equality policies was undertaken by the Equality Officer under the direction of the Equality Committee, with the aim of developing a consolidated Equality Policy for staff and students that would further College's commitment to equality and inclusivity in all its activities within the framework provided by the Employment Equality Acts 1998-2010 and Equal Status Acts 2000-2010.

The Equality Officer and key areas in the College (the Disability and Staff Offices) continued to work proactively under the guidance of the College's Equality Committee and other groups to help ensure a supportive work environment necessary for the promotion of the employment of people with disabilities and to providing equal participation and career development across all nine equality grounds. These efforts included the supply of management information, a gender analysis report on the Merit Bar, a dignity and respect awareness programme for staff and students, and culminated in a number of College-wide events including Positive Ageing Week, International Women's Week, and the Disability Service's 10th anniversary in addition to the College Equality Fund initiatives. The College continued to work closely with the IUA Equality Network sharing good practice and securing funding for sectoral projects.

The Equality Fund programme, established in 2007 by the Equality Committee, supported 12 staff and student projects in 2009/10 under the themes 'Enriching the inclusive College community', 'Mental health and equality', 'Treat others as they would like to be treated', 'Men and women in College: encouraging full participation', and 'Challenging Stereotypes'.



In May 2010, Trinity College was selected as an Ability Company in all six categories of the 02 Ability Awards: Leadership, Customer Service, Environmental Accessibility, Learning Development and Progression, Retention and Well Being, and, Recruitment and Selection. The 02 Ability Awards, organised by Kanchi, recognise best practice in the inclusion of people with disabilities, both as customers and as employees.

The Centre for Women in Science and Engineering Research (WiSER) aims to increase female representation in science and engineering research in Trinity. The programme for 2009/10 was designed to work with women researchers in science, engineering and technology, addressing the barriers that have been identified to retaining, advancing, and returning to these fields. These efforts included a mentoring programme, career development programmes, peer-support academic writing groups and networking events. In addition, the Director of WiSER is the Irish gender expert for the European Commission Group on Women and Science.

The Trinity Alumni Career Network, launched in February 2010, is an initiative aimed at assisting the College's alumni considering a career change during the current challenging economic climate. The Trinity Alumni Career Network will run a programme of panel discussions, workshops, career advice and networking opportunities for its graduates on an annual basis.







#### 8. Capital Development Programme

## Major projects

During 2009/10 the Long Room Hub was completed and work continued on the construction of the Biomedical Sciences Institute on Pearse Street. The College completed the purchase and refurbishment 7-9 South Leinster Street (formerly Phoenix House) and initiated a tender process aimed at providing 1,000 more student residential places.





Trinity Long Room Hub

#### 8.1 **Completed Projects**

## **Trinity Long Room Hub**

A new state-of-the-art building which houses the Trinity Long Room Hub, Trinity College's arts and humanities research institute, was officially opened by the Minister for Science, Technology and Innovation in September 2010. The institute received substantial investment of €10.8 million from the Government and European Regional Development fund under the Programme for Research in Third Level Institutions (PRTLI).

This project provides some 1,100 sq.m of new space for research in Arts and Humanities in a striking new building located in Fellows Square between the 1937 Reading Room and the Arts Building and will be linked to the existing facilities in the 1937 Reading Room. The facilities include a reading room, visiting researchers' rooms, a knowledge exchange, a video conferencing suite and a digitisation area.





This initiative will facilitate the College's strategic development of research in the Arts, Humanities and Social Sciences through the full exploitation of the College's outstanding research collections and the creation of a community of scholars across a range of disciplines. It will seek to answer questions about human identity in global contexts, focussing research energies and thereby helping to realise the creative potential of Trinity College as a great national and international institution.

## Boots Practice of Pharmacy Teaching and Development Unit

A state-of-the-art teaching facility which will provide training to the highest standard for Ireland's pharmacists of the future was opened by the Minister for Health and Children in June 2010 at the School of Pharmacy and Pharmaceutical Sciences. It is a collaborative initiative between Trinity and Boots Ireland, with the support of Helix Health.

The new facility, the 'Boots Practice of Pharmacy Teaching and Development Unit', includes a range of modern facilities aimed to equip pharmacy students with the necessary skills to meet the challenges and opportunities of the future. Stand-alone teaching stations will help students become familiar with the more traditional tasks of dispensing and administration, while separate areas have been designed to provide training in advanced pharmacy services.

#### 7 - 9 South Leinster Street

The accommodation in 7 - 9 South Leinster Street (formerly Phoenix House) was refurbished to provide accommodation for postgraduate students from the faculty of Arts, Humanities and Social Sciences, for the School of Linguistic, Speech and Communication Sciences and for the Student Counselling Centre, facilitating relocation from accommodation in Pearse Street and rented off campus premises.

## Other projects

In addition, other capital projects undertaken include the refurbishment of the Pavilion to provide universal access, a Club Room and modern facilities; the refurbishment of residential accommodation in New Square; planning work for the proposed Students' Centre in Luce Hall and the cobble reduction programme in Front Square to enable universal access; grounds improvement projects; the refurbishment of existing facilities at 15/16 Westland Row for TrinityHaus, laboratory refurbishment projects in the Moyne Institute, and the creation of facilities for SFI researchers at the Trinity Technology and Enterprise Campus where storage and workshop facilities for the College Art Store were created also.

## 8.2 Construction Projects

#### **Biomedical Sciences Development**

The Biomedical Sciences Development is the most ambitious construction project in Trinity's history. This site, between Cumberland Street and Sandwith Street, which was previously used as a surface car park, is being redeveloped to provide a mixed development of academic and commercial space of over 30,000 sq.m. The Higher Education Authority has provided capital funding of over €56 million for this project under PRTLI Cycle 5 from the Government and the European Regional Development fund which includes €2.25 million for the Irish Transgenic Network project which will be housed in this building.





Several defined centres - a Centre for Cancer Drug Discovery, a Centre for Bioengineering and Medical Device Technologies, an Immunology Research Centre - and medical teaching facilities will be located in the building. The academic space will facilitate the relocation of certain disciplines to purpose built accommodation. This development will build on Trinity's leadership position in immunology, neuroscience and cancer to bring Ireland to the frontiers of research benefiting human health and society.

The development adjoins Pearse Railway Station and the design incorporates a new entrance to the Station. This project started on site early in August 2008 and is scheduled to open in June 2011. The commercial space will include shops, office accommodation and laboratory space for industry-academic collaboration.

#### Industry-Academic Collaboration space

In recognition of the key role that can be played by the Institute in encouraging and supporting leading edge research and employment opportunities Trinity College Dublin is providing 3,000 sq. m. on the first floor and part ground floor of the Biomedical Sciences development for industry-academic collaboration. Working closely with Enterprise Ireland and The IDA, it is seeking partners or established and emerging bio-medical companies that see the advantage of the proximity to research teams in the College and the use of the research and development facilities on campus as a important feature in their development. This is consistent with the policy in the new programme for government to establish Technology Research Centres, linked to third level institutions, in order to bridge the gap between research and technology commercialisation.

## 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 a start on site is imminent. 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 is expected to open in late 2011.

#### 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. It will be ready to accept its first intake of students in September 2011.

#### Trinity Centre Tallaght Hospital, Phase 2

The College continues to work on planning and fundraising to support the provision of an Institute for Preventive Medicine associated with the Trinity Centre at AMNCH Tallaght.





#### Additional Student Residences

Trinity is endeavouring to increase the level of residential accommodation it can provide for Irish and international students. It has identified an initial requirement of 1,000 student residential units with potential demand for further 2,500 student residential units. In 2009 Trinity initiated a procurement process to identify a development partner to provide these facilities on a site within a short commuting distance of the College. This process is at an advanced state and it is hoped that a preferred tenderer will be identified in mid 2011.

#### **Development Plan**

Arising from the approval of the College's Strategic Plan 2009–2014 a draft Development Plan identifying the scale and direction of future major developments for Trinity College over the next 10 – 20 years was presented to College Board in June 2010. It is anticipated that the final plan will be adopted by the Board in March 2011.

#### 8.3 **Energy Conservation**

Trinity consumed over 34.8 million kWh of electricity and over 35.5 million kWh of natural gas and oil during 2009/10. Expenditure for the year for all utility related costs amounted to €6.4 million. This is a substantial reduction in cost which was the result of a competitive tender for electricity which captured a good price for the year.

Savings were achieved through the e3 group, comprising UCD, DIT, DCU and TCD, as they used their collective purchasing power to get the most advantageous electricity and gas tenders from suppliers. The bulk of Trinity's electricity was sourced from Energia which provided 50% of the power from renewable wind generated electricity. Using such a 'green' energy supplier is an effective way to reduce CO2 emissions substantially.

During 2009/2010 the e3 programme reported further reductions of energy consumption in the targeted College buildings. This 7.5% reduction in the targeted buildings is measured in the context of the very severe winter weather. The e3 programme is ongoing and the targeted buildings were expanded to a total of 25 which represent over 76% of College energy consumption. As part of the process the system for monitoring and targeting (M&T) energy consumption is being developed to make it more reliable and expandable to cover more buildings. The current phase of the e3 programme commenced in April 2010 and is concentrating on developing the M & T system and energy savings in the newly added buildings.

In the course of 2009/10 projects were identified and implemented to reduce energy consumption. These projects attracted funding from the Sustainable Energy Authority of Ireland. Projects implemented included replacement of older inefficient lighting, improved equipment control with the building management systems and improved building insulation.

On an ongoing basis we have examined proposals for improved sustainability within new buildings. This has involved working with the design consultants to identify the most economical and environmentally efficient solution for each building. New buildings such as the Biomedical Sciences development completing in 2011 will have some innovative equipment that will minimise energy consumption and reduce its overall environmental impact.



## 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.

Trinity groups its fundraising priorities into five themes, each articulating the relevance, importance and value of a university today – with an adopted mission that Trinity will play a pivotal role in helping Ireland be the most productive place to invent, work and learn and the most civilised place to live and contribute to local and global society.

The College cannot rely on State funding alone - securing private support is essential to Trinity's future. In the period 1 October 2009 to 30 September 2010, €14.5 million was secured in private donations (€27 million in 2008/09). The benefits of this private support can be seen throughout the College.

Planning for the next phase of fundraising is underway, ensuring it will support the College's emerging Strategic Plan for the period 2009-14. Current priority projects include:

- Completing the funding for the Biomedical Sciences Institute on Pearse Street
- Refurbishment of the Long Room with expanded Humanities research facilities
- New Business School Building and new Engineering and Natural Sciences development
- Various projects supporting College's 'Engagement with Society' theme
- Professorships & Lectureships in College's academic priorities.

Central to 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, 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 2010 as prepared on the agreed harmonised basis for the Irish University sector were approved by the Board on 26 January 2011. 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 are prepared in accordance with generally accepted accounting standards, are expected to be finalised in 2011.

In 2010, funding pressures experienced at a national level resulted in a reduction in core funding on 2009 levels. However, despite the reduced funding envelope, the College ended the year on a solid financial platform due to the actions approved by Board along with the continued flexibility and goodwill shown by students and staff. The outcome for 2009/10 is effectively a break-even position (excess of income over expenditure of €0.18 million) with accumulated core funding reserves standing at €0.15 million at 30 September 2010. The financial performance for the year reflects the reduction in the 2010 calendar grant, the increase in the student charge of €600 to €1,500 from 1 October 2009 and the national pay rate reductions effective from 1 January 2010. Total income (excluding funded research) decreased by 9.3% to €195 million with State Grant accounting for 38% [2009:49%], Student Fees 51% [2009:41%] and Other Income 11% [2009:10%]. Taking account of the 'Free Fees Initiative' funded by the State, the total core income funded from exchequer sources amounts to 61% (2009: 70%). Total expenditure (excluding funded research) decreased by 8.3% to €197 million with the pay:non pay ratio (excluding funded research) in the current year of 74:26 compared to 71:29 in 2009.

Research activity for 2009/10 amounted to €82 million, a decrease of 8.6% over 2009 levels. Given the high proportion of research activity currently funded by the State, the College continues to be at risk from any significant future downward adjustment in State research investment. As in previous years, it is important to once again highlight that research activity, which does not fund an appropriate contribution to support infrastructural and academic/administrative services, continues to put pressure on resources required for teaching and unfunded research.

The Balance Sheet continues to remain strong in the current climate with total net assets of the College continuing to grow during the year, amounting to €687 million at 30 September 2010. The level of capital investment continued at a significant pace mainly related to the continuing construction of the Trinity Biomedical Sciences Institute, the completion of the Trinity Long Room Hub, and the refurbishment of 7-9 South Leinster Street and student residences. Similar to previous years, the lack of adequate funding continues to add to the risk profile by restricting the College's capacity to address ongoing and backlog maintenance issues and small capital projects as well as its ability to progress accessibility, health & safety and conservation works programmes. There was no accumulated capital deficit at 30 September 2010.



At present, the College is currently heavily reliant on exchequer sources of revenue and is expected to manage its financial affairs within the parameter of the Universities Act, 1997; deliver on its objectives in the absence of frameworks for multi-annual funding; and manage financial resilience/renewal. In this context, the College is pursuing a financial strategy where income generation and diversification is promoted and motivated; cost management is supported by procurement; efficiency initiatives are prioritised and activity is managed within budgeted resources over the medium term.

The College has no accumulated recurrent deficit at the end of the 2009/10 academic year. The financial outturn for the year has been satisfactory and is clearly attributable to sound financial planning along with the continued effort and commitment of the College community to adapt to a constantly changing and challenging funding environment. It is clear that the environment of steadily rising public funding has ended with the College facing a future that is demand-led and one that will have much less certainty and predictability, particularly in relation to Government sourced funding. However, it is an environment that will present many opportunities in terms of revenue generation and further efficiencies. The impact of funding reductions on the quality of College's outputs is a real concern and the priority of the Government must be the protection and preservation of resources to organisations that support and deliver on the national agenda of economic recovery. In these challenging times, it is essential however that College embraces opportunities going forward and continues to invest in capital and recurrent activities.





## Year ended 30 September 2010

	2010	2009
	€′000	€′000
Income		
State Grants	73,931	105,392
Student Fees	98,672	88,636
Other Income	22,166	20,897
	194,769	214,925
Research Grants and Projects	81,977	89,715
Total	276,746	304,640
Expenditure		
Academic Faculties	109,481	109,141
Academic and Other Services	21,301	22,958
Premises	26,061	27,955
Amount Allocated for Capital Purposes	1,000	13,507
Central Administration and Services	14,737	15,350
General Educational Expenditure	9,186	9,127
Student Services	5,311	5,626
Miscellaneous Expenditure	10,075	11,063
Academic and Related Services	197,152	214,727
Research Grants and Projects	79,415	80,165
Total	276,567	294,892
Surplus on Activities before Amortisation of Capital Reserves and Grants, Ancillary Services and Depreciation of Fixed Assets	179	9,748
Surplus on Ancillary Services	1,342	2,934
Depreciation of Fixed Assets	(28,877)	(31,005)
General Reserve Transfer	27,535	28,071
Net Surplus for year	179	9,748



# At 30 September 2010

		2010	2009
		€ ′000	€ ′000
	Fixed Assets		
	Tangible assets	793,643	747,470
	Investment properties	16,478	-
		810,121	747,470
	Current Assets		
	Bank and cash balances	160,620	163,739
	Debtors and prepayments	47,443	39,450
	Stocks	372	328
		208,435	203,517
	Current Liabilities		
	Creditors and accrued expenditure	(205,450)	(195,409)
	Bank balances	(4,365)	(99)
		(209,815)	(195,508)
	Net Current (Liabilities)/ Assets	(1,380)	8,009
	Long Term Liabilities		
	Creditors due after one year	(121,663)	(78,904)
		687,078	676,575
	Represented By:		
	General reserve	686,930	676,606
	Revenue reserve	148	(31)
		687,078	676,575





# TRINITY COLLEGE DUBLIN COLÁISTE NA TRÍONÓIDE, BAILE ÁTHA CLIATH

THE UNIVERSITY OF DUBLIN

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