



**Trinity College Dublin**  
The University of Dublin



# Annual Report 2014 -2015



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## Members of the Board of Trinity College Dublin during the 2014/2015 academic year were:

### Ex-Officio Members

Provost, Dr Patrick Prendergast (Chair)  
Vice-Provost/Chief Academic Officer, Professor Linda Hogan  
Senior Lecturer/Dean of Undergraduate Studies, Professor Gillian Martin  
Registrar, Professor Shane Allwright  
Bursar/Director of Strategic Innovation, Professor Gerard Lacey

### Elected Fellows and Fellow Professors

Professor Peter Coxon (2014-2018)  
Professor Sylvia Draper (2014-2018)  
Professor Eileen Drew (2012-2016)  
Professor Brian Lucey (2014-2018)  
Professor John McGlip (2012-2016)  
Professor Cliona O'Farrelly (2012-2016)  
Professor Micheál Ó Siochrú (2012-2016)  
Professor Diarmuid Phelan (2014-2018)

### Elected Non-Fellow Academic Staff

Professor William Dowling (2012-2016)  
Mr Dermot Frost (2012-2016)  
Professor Des O'Neill (2012-2016)  
Mr Aidan Seery (2014-2018)  
Ms Catherine McCabe (2014-2018)

### Elected Non-Academic Staff

Mr Fred Cowzer (2012-2016)  
Mr Gerard Garrahan (2013-2016)  
Ms Shelia Dunphy (2014-2018)

### Student Representatives

President Graduate Students' Union, Ms Megan Lee (2014-2015)  
President Students' Union, Mr Domhnall McGlacken Byrne (2014-2015)  
Education Officer Students' Union, Ms Katie Byrne (2014-2015)  
Welfare Officer Students' Union, Mr Ian Mooney (2014-2015)

### External members

Dr Olive Braiden, nominated by the Arts Council (2010-2018)  
Mr Jackie Gallagher, nominated by the Minister for Education and Skills (2010-2015)

### In Attendance Ex-Officio

Secretary, Mr John Coman  
Treasurer/Chief Financial Officer, Mr Ian Mathews

The Chief Operating Officer is in attendance at Board  
The Vice-Provost for Global Relations is in attendance at Board

Attendance at Board meetings and Board expenses are recorded in Appendix I and II respectively

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

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## UNIVERSITY ACTIVITIES

### 1. Academic Developments

#### 1.1 World University Rankings

Trinity College Dublin is ranked Ireland's leading university in the QS World University Rankings, the Times Higher Education World University Rankings, and the Academic Ranking of World Universities, Shanghai.

Trinity is ranked 78th in the world and 27th in Europe in the 2014/15 QS World University Rankings across all indicators, with a top 50 ranking in five subjects and top 100 ranking in a further nine areas. The University's leading 50 subjects include English, Language and Literature (32), Politics & International Studies (33), History (39), Biological Sciences (48) and Modern Languages (49).

The University is ranked in the QS top 100 universities in the world in each of the nine areas: Chemistry, Computer Science and Information Systems, Education, Geography, Law, Medicine, Pharmacy and Pharmacology, Philosophy and Psychology.

#### 1.2 Quality

Recognised globally as a university of high quality in teaching and research, Trinity's education is distinctive in being research-led and student-centred. The University 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 University'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 University, as shown in particular by participation in the work of his or her Discipline or School and an effective record in teaching.

Thirteen Fellows were announced on Trinity Monday 2015, including two Honorary Fellows, Professor Yvonne Galligan, Founding Director of the Centre for Advancement of Women in Politics (CAWP) and Director of Queen's Gender Initiative

(QGI) and Adjunct Professor Leo F. Goodstadt, School of Business, committed supporter of the development of the Trinity Centre for Asian Studies at Trinity College Dublin and the Hong Kong government's chief policy adviser from 1989 to 1997.

In 2014/15, the Quality Office facilitated quality reviews of the School of Languages, Literatures & Cultural Studies and the School of Education, along with reviews of the College Day Nursery, the College Health Service, the College Disability Service, the Student Counselling Service and the Chaplaincy. A review of the common entry Science programme (TR071) also took place, the first large programme review conducted in Trinity. The reports arising from these reviews provide important feedback to the areas under review, and to the University, on academic and service provision.

Trinity continued its active engagement with Quality and Qualifications Ireland (QQI) and with other key national stakeholders in 2014/15. It participated in the Irish Universities Association (IUA) through representation on its five Standing Groups and contributed to university sectoral responses to a number of QQI consultations on the development of policies and procedures to implement the *Qualifications and Quality Assurance (Education and Training) Act 2012* and associated quality assurance guidelines expected to be published in 2016.

Trinity participated in the third year of the Irish Survey of Student Engagement (ISSE) in 2014/15 and continues to support this initiative under the National Strategy for Higher Education to 2030. The University also participated in the International Student Barometer survey, the results of which will influence strategic developments to improve the international student experience in line with the Code of Practice for Provision of Programmes of Education and Training to International Learners published by QQI in 2015.

## 2. Education<sup>1</sup>

### 2.1 The Trinity Community

Trinity is a community of scholars, made up of students, academic staff, and administrative staff. Diversity is at the heart of what makes Trinity distinctive, and it attracts students and staff from all around the world, and from all kinds of different socio-economic backgrounds and experiences.

In total, there were 17,080 registered undergraduate and postgraduate students in 2014/2015. Of these, approximately 80% were from the island of Ireland, 8% from other EU countries, 5% from North and Central America and 7% from other parts of the world (including non-EU countries in Europe). In 2014/15, 58% of the student population was female and 42% was male. A total of 12,633 were registered on undergraduate programmes and 4,447 on postgraduate programmes.

The student community is made up of students from all kinds of socio-economic backgrounds and age groups. In recent years, the university has been increasing the number of non-traditional students it admits, including students with disabilities, and mature students. In 2015, 20% of all CAO places were filled by non-traditional students, and 18% of these were mature students.



Entrance Exhibition Awardees Holly Mathews and Stephen Cunningham of Mountrath Community School, Co Laois, Noelle Murphy of Borrisokane Community College, Co Tipperary, and Bronagh Duff, Co Meath

### 2.2 Admissions Statistics

In 2014 Trinity received 7,437 (11%) of first preference applications in the CAO system. This constitutes a decrease of 6% from 7,919 in 2013.

Of the 69,218 people who applied for Level 8 courses in Irish higher education institutions through the CAO in 2014, 17,795 listed Trinity for one or more of their CAO course preferences, a decline of 2% on the figures for 2013 when the number was 18,161. Trinity continues to have the second highest number of overall first preferences in the country.

A total of 422 first-year students were awarded special 'Entrance Exhibition Awards' in November 2014. These students received 560 points or higher in their Leaving Certificate examination or equivalent second-level examination in the EU. Of this figure, 381 were Leaving Certificate students, 27 were A-level students and 14 students held other EU qualifications.

Trinity trialled for the first time a new admissions model on three courses in a feasibility study which will be shared with the entire third level sector. It was conducted by Trinity in partnership with the CAO, for History, Law and Ancient and Medieval History and Culture. The objective was to see whether it might be possible to develop a better and fairer mechanism to identify and admit applicants to college. There were 270 applications for the 25 places in the three subjects on offer (History, 10 places), (Law, 10 places), and (Ancient and Medieval History and Culture, 5 places) in September 2014.

### 2.3 Northern Ireland Engagement Programme

In July 2014, Trinity launched a ground-breaking new initiative to increase the number of incoming students from Northern Ireland. In response to a recent decline in numbers from Northern Ireland, Trinity announced a feasibility study to find a new way of admitting A-Level applicants from across the EU, which will be tested in the first instance for applicants from Northern Ireland.

Trinity embarked on an ambitious Northern Ireland Engagement Programme, visiting schools and careers fairs across Northern Ireland with student ambassadors from the current student community, and reconnecting with schools, parents, teachers and alumni. The feasibility study draws on that work by seeking to remove one of the biggest obstacles, that only one in eight students in Northern Ireland take four A-Levels. The aim is to triple the numbers of students admitted from Northern Ireland each year, so that 8% of the student body will be from Northern Ireland, thus reaffirming Trinity's historic mission as a university for the whole island, attracting students with ability and potential from all over.



Newly elected Scholar Alissa Dunsky celebrates with Professor Lorraine Leeson, Director of the Centre for Deaf Studies

### 2.4 Scholarships

Foundation Scholarship is a University institution with a long history and high prestige, and is a distinctive feature of student life at Trinity. A Scholarship at Trinity College remains the most prestigious undergraduate award in the country, and it is an award that has undoubtedly helped to foster long-lasting links between many outstanding graduates and the University. A principal objective of Trinity is the pursuit of excellence: one of the most tangible demonstrations of this is the institution of Scholarship.

In the 2014/15 academic year 68 students were awarded Scholarships. Recipients of the scholarships represented all faculties: the Faculty of Arts, Humanities and Social Sciences (24); Faculty of Engineering, Mathematics and Science (20); Faculty of Health Sciences (17); and Multi-Faculty (7).

### 2.5 The Curriculum – New Courses

The following courses commenced at the beginning of the 2014/15 academic year:

#### Undergraduate

- BSc in Diagnostic Radiography in conjunction with Singapore Institute of Technology
- Professional Diploma in Orthodontic Therapy
- Diploma in Acting and Theatre
- Diploma in Music Teaching and Performance delivered by the Royal Irish Academy of Music

#### Postgraduate

- PG Certificate in 21st Century Teaching and Learning
- PG Certificate in Implementation Science
- PG Certificate in Specialist Practice
- Diploma in Applied Social Studies (online)
- MFA in Stage Design
- Masters in Education Studies (Early Childhood Education)
- Professional Masters Education
- MPhil in Irish Art History

## 2.6 Commencements, Firsts and Gold Medal Awards



Honorary Degree recipients Stanley Quek, Grigory Kruzhkov, Margaret Murnane and Camille Souter with Provost, Dr Patrick Prendergast, and Chancellor of the University, Mary Robinson

A total of 4,942 degrees were conferred (2,966 primary degrees and 1,976 higher degrees) in 34 separate commencement ceremonies in 2014. Five hundred and twenty-seven students received first class honors at the degree examinations in 2014/15 and, of these, 67 were awarded Gold Medals.

Honorary conferring took place at the commencement ceremonies on 8 December 2014 and 26 June 2015. EU Ambassador to the US, David O'Sullivan, Poet Paul Muldoon, founder of Front Line Defenders, Mary Lawlor and leading Scientist Nancy Hopkins were conferred with Honorary Degrees at the Winter Commencements.

Recipients of Honorary Degrees at the Summer Commencements were the renowned painter Camille Souter, poet, Grigory Kruzhkov, Singaporean diplomat and businessman, Stanley Quek and leading US-based optical physicist, Margaret Murnane.

Thirty-two doctoral students graduated from the inter-university Innovation Academy whose mission is to develop a new kind of PhD graduate. The students from Trinity and Queen's University, Belfast, were presented with Graduate Certificates in Innovation and Entrepreneurship by the Minister for Education and Skills, Jan O'Sullivan, at a special graduation ceremony in the Department of Education and Skills in January 2015. Through a series of taught modules the PhD students gain an understanding of how innovation can convert

knowledge into products, services and policies for economic, social and cultural benefit. The modules include the creative arts, social entrepreneurship, engineering, technology and business where they also work in multidisciplinary teams. The students will continue working towards their individual PhDs covering topics ranging from climate science and nanotechnology, to factors impacting the mental health of children.

## 2.7 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 University'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 Education and Training Board (CDETB)
- The Post Entry Progression Programme
- Research and Evaluation
- The Trinity Access 21 Project

There were 252 admissions to Trinity College through the Trinity Access Programmes in 2014/15.

Linking with over 40 primary and second-level schools with little or no history of progression to third-level, TAP, with the assistance of some 30 Trinity departments, enabled over 5,000 students, parents and teachers to participate in on-campus activities during 2014/15. These include a Maths and Science Scholars Programme for 6th class pupils, the Med Day for Junior Cycle students as well as Shadowing Days, Summer Schools and mentoring for second level students.

TAP also provides a range of post-entry supports, activities and career development programmes, as well as financial assistance to undergraduate students who have entered Trinity through alternative admissions routes. There were 900 students supported by the Trinity Access Programmes undertaking degree studies in Trinity in 2014/15.

## 2.8 Provost's Teaching Awards



*Recipients of the 2015 Provost's Teaching Awards Dr Ciaran Simms, Dr Ciaran O'Neill, Ms Sheila Ryder, Ms Cicely Roche, Mr David Kenny and Dr Daniel Geary*

The Provost's Teaching Awards are the University'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.

The awardees in 2015 were Dr Daniel Geary, School of Histories & Humanities, Dr David Kenny, School of Law (Early Career Award), Dr Ciaran O'Neill, School of Histories & Humanities (Early Career Award), Ms Cicely Roche, School of Pharmacy & Pharmaceutical Sciences (Early Career Award), Ms Sheila Ryder, School of Pharmacy & Pharmaceutical Sciences and Dr Ciaran Simms, School of Engineering. All recipients were recognised for their dedication and commitment to teaching and learning excellence.

## 2.9 Online Education

Trinity's first online students (37) from the Diploma in Applied Social Studies graduated in November 2015, a significant milestone for online education provision in Trinity. The event represents the first step towards the University's target of 1,000 online students by 2019.

Trinity welcomed a new cohort of students to five fully online postgraduate courses in Social Studies, Dementia, Radiotherapy, Managing Risk, and Clinical Exercise in September 2015. These courses were developed together with a new entity, Trinity Online Services Limited.

Alongside the five new online courses, Online Education continued its engagement with Massive Open Online Courses (MOOCs) in collaboration with Trinity academics and Futurelearn. The success of the 'Irish Lives' MOOC in 2014 led to another iteration of the course in March 2015. Over 11,000 learners took part in the free course delivered jointly by Online Education and the School of Histories and Humanities, bringing the total of registered learners on the MOOC to almost 30,000.

The development of Trinity's second MOOC took place in 2014/15 to start at the beginning of the next academic year. Led by the Professor of Medical Gerontology, Rose Anne Kenny, the 'Strategies for Successful Ageing' MOOC aims to empower older adults to advocate for their health and well-being. A team of Trinity academics from the EngAGE Centre for Research in Ageing, in collaboration with Online Education, devised the course to showcase current research in ageing, and encourage learners to share their ageing experiences and personal strategies in a global online community.



## 2.10 International Agreements

In 2014/15 over 30 new agreements were signed with leading universities in the US, Latin America and Asia, including ten new student exchange agreements. These agreements, fostering outward mobility, will bring the number of places available for Trinity students to undertake an exchange to a non-EU partner university on a college-wide basis to over 100 in the next academic year. This represents a five-fold increase since the Global Relations Strategy was launched in 2012.

Trinity and Singapore Institute of Technology signed an agreement in October 2012 commencing a partnership between the two institutions and the launch of two programmes in Physiotherapy and Occupational Therapy which give recognition to the three-year diplomas in these disciplines from Nanyang Polytechnic. Under the agreement students complete a one year programme, part of which includes studies and/or placements in Ireland. On completion of the programme students are awarded a degree from Trinity College Dublin. The first cohort of students registered in September 2012 and graduated in June and December 2013. In 2014 the partnership was expanded to include Radiation Therapy and introduced a new course in Diagnostic Radiography.

Trinity signed a strategic partnership with Fudan University, one of China's top institutions, in the presence of the President of Ireland, Michael D. Higgins during a State visit to China in December 2014. Trinity's Vice President for Global Relations, Professor Juliette Hussey, and Fudan's Professor Feng Xiaoyuan, Vice President for International Affairs signed a Memorandum of Understanding and Student Exchange Agreement at Fudan University's historic campus. The partnership includes a significant collaboration between the Trinity Long Room Hub Arts and Humanities Research Institute, and the Fudan Development Institute, as an important mutual strategic step towards the expansion of Humanities research via international collaboration.

In July 2015 the Provost signed an agreement with Thapar University in India to collaborate on teaching and research in Engineering and Computer Science. High calibre undergraduate students will come to Trinity for year 3 of these disciplines, while staff will collaborate on research and academic practice.

Taken together, and including the well-established Erasmus Programme for study in the EU, the increases in college-wide and School-level placements and exchanges mean that over a quarter of our undergraduate student body now have the opportunity to develop experience abroad.



### 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 University'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, Student Learning Development, Tutorial Service, Postgraduate Advisory Service, the Student Health Centre, Counselling Services, Disability Office, the Chaplaincy, Careers Advisory Service, 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 2014/15 academic year, students and student societies were successful in many areas.

The Dean's Roll of Honour for Volunteering was enhanced with the introduction of three levels of recognition: the Dean's List for Volunteering, Dean's Leadership Award for Volunteering and the Trinity Legacy Award for Volunteering. Trinity recognized 107 students on the Dean's List with 60 students receiving the Leadership Award. In addition two students, Aoife Price of Headstrong and Gareth Walsh of the Volunteer Tuition Programme were recognised with the Trinity Legacy Award for Volunteering.

Trinity student, Dr John Ahern was awarded a prestigious Fulbright scholarship in 2015. John will collaborate with Harvard University to strengthen human resources for health in developing countries, through the integration of oral health training for primary care health workers. Seven Trinity students were awarded George Berkeley

Gold Medals for their leading-edge research and course work at the Undergraduate Awards ceremony in December 2014. The winners were Tadhg Giles, Pierce Healy, Fiona Saluk, Stephen Quinn, Susannah Keller Finn, Liath Gleeson, Kyrsten Baker and Jack Fitzsimons. Three Trinity students were selected from over 400 applicants to participate in the Washington Internship Program 2015, a cross-community and cross-border organisation that identifies promising young people with a commitment to service and a track record of leadership. Faris Bader, Rachel Lavin and Finn Murphy study the disciplines of Mathematics, English and History, and Mechanical Engineering respectively.

Over 500 students participated in Trinity Med Day 2014 and raised over €46,000 for Trinity's teaching hospitals across Dublin, benefiting palliative care services, infectious disease investigations, prostate cancer research and Crohn's disease therapy research.



*Students Union Ents Officer, Finn Murphy; Trinity Foundation Board member, Fergal Naughton; Provost, Dr Patrick Prendergast; and Co-chairs of Trinity Volunteering, Sarah McAviney and Tara O'Broin at the launch of Raise & Give (RAG) week 2015'*

This year's Raise & Give (RAG) Week was the University's most successful to date. Organised by the Students' Union and Trinity Volunteering, over €23,500 was raised in total, including a challenge grant of €10,000 matched funding provided by alumni donations. RAG Week raises awareness and donations for several worthy Trinity charities supporting student education and engagement with society.

A sample of student clubs and society highlights during the year include:

- Trinity Rowers won the annual Colours Boat Races on the Liffey.
- Trinity Hurling team won the Ryan Cup for the first time in their history and the Ladies Gaelic Football team won the Giles Cup, also for the first time.
- MathSoc won the Maths intervarsities, in both the team and the individual sections.
- Both Trinity debating clubs, the College Historical Society (the Hist) and the Philosophical Society (the Phil) had successful years, with the Phil fielding a finalist in the Edinburgh Cup. The team winners of the Annual *Irish Times* debating competition were Ronan O'Connor and Hugh Guidera of the Phil, who proposed the motion 'This house believes that the fourth estate failed the Irish people in their hour of need'. William Dunne of the Hist was a runner up in the competition and Matthew Collins, also from the Phil, was an individual finalist.
- Trinity was the outright winner of the National Student Media Awards, the Smedias, scooping ten awards at the ceremony held in April 2015. The awards received over 1,000 entries from student journalists, broadcasters and producers from all across Ireland.

The first Trinity Irish Language Awards were held in April 2015 in Seomra na Gaeilge, Trinity's Irish language common room. The awards, presented by Minister of State for Gaeltacht Affairs, Joe McHugh, TD were given in recognition of the important work being done by students and staff for the promotion of the Irish language. The Traditional Irish Music Society won the Student Society category while 4th year law student, Fionn Ó Deá won the Individual Student award.

Trinity's An Cumann Gaelach student society and Irish Language Office were part of Comhrá '14, which broke the world record for the longest ever Irish Language conversation. The event, which was run by Seachtain na Gaeilge, ran over a mammoth 169 hours.

Three Trinity postgraduate students were successful in the 2014 Irish Research Council's Employment-Based Postgraduate Awards scheme. A total of €4.5 million was allocated by the IRC under this scheme to enable some of Ireland's top postgraduate researchers to work with

leading companies around the country. The Trinity students who benefited from the awards and their employment partners were: Seán Dooney, School of Engineering, Employment Partner: DTS; Conor Dowling, School of Business, Employment Partner: Future Analytics; Lucy Whiston, School of Medicine, Employment Partner: Adelaide Hospital Society.

The School of Social Sciences and Philosophy awarded prestigious Grattan Scholarships to three postgraduate students: Purnima Kanther who is researching a thesis titled 'Financial Inclusion and Financial Sector Development in Developing Countries'; Margaryta Klymak who is undertaking research titled 'A New Model for Development Aid: the Role of the Private Sector'; and Yannick Timmer who is researching 'The Global Financial System'.

Over 10,500 students, just over 60% of the student body, were actively involved in sport and recreation in 2014/15. At the second annual Sports Awards in April 2015, Sporting Commons celebrated 40 years and ten University Colours, 'Pinks', were awarded by the Captains Committee of DUCAC, including the first ever for netball: Victoria Mullin (Air Pistol Shooting), David Fitzgerald (Climbing), Maxton Milner (Fencing), Omar Nouhi (Judo), Susannah Cass (Rowing), Sinead Dolan (Rowing), Ruth Morris (Rowing), Sacha Shipway (Netball), Conor Short (Orienteering) and Cian Quinn (Ultimate Frisbee).

Sport at Trinity reached another milestone when two students from the College's Centre for Inclusivity and Intellectual Disability were amongst the 61 sports scholarships announced. Maeve Philips won gold, silver and bronze medals at European and World Down Syndrome swimming events, and Fiachra Costello won minor football championship and minor hurling league honours with Whitehall Colmcilles Club.

## 4. Research Activities

### 4.1 Research Themes

Trinity is recognised as one of the world's leading research-intensive universities and its research continues to address issues of global societal and economic importance. The University's research strategy is based on developing multidisciplinary areas in which Trinity has the critical mass of world-class researchers needed to deliver research of global consequence.

Among the priority research themes being addressed by Trinity researchers are ageing, nanoscience, telecommunications, neuroscience, identities in transformation, cancer, international integration, creative arts practice, and the inclusive society. These are topics that not only address issues of immediate and long-term concern to society but offer opportunities for future economic development. The University's commitment to a research-led education means that our students are exposed to leaders in their discipline, to the latest knowledge and ideas, and to an education that emphasises analytical skills and creative thinking, and gives students an opportunity to develop a broad range of skills by engaging in personal research.

This excellence in research underpins Trinity's Innovation and Entrepreneurship strategy. Research is central to the generation of the new disruptive ideas that will underpin future sustainable businesses. The knowledge created by Trinity is critical for the economic development of Ireland as it is for the education on offer to our students.

Trinity's research themes are supported by a set of research institutes that provide the infrastructure needed to support multi-disciplinary research as well as engagement with enterprise and social partners working in partnership with Trinity's 24 schools.

Trinity is playing a leading role in several major national longitudinal studies, including children's research and ageing, and hosts national centres for intelligent content, nanoscience and telecommunications research supported by Science Foundation Ireland (SFI) on campus. Trinity's major research institutes in areas such as neuroscience, biomedical sciences and 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).

### 4.2 Research Funding

Research expenditure rose by 9% to €85.2 million in 2014/15 reflecting the University's success in securing new awards over the past number of years, in particular from SFI and the EU. The value of new awards entered into in the year 2014/15 amounted to €105 million, an increase of 57% on the prior year bringing the total value of the Research Portfolio to over €500 million.

The average contribution to indirect costs from research activity of 18% 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 1,920 active research accounts and research activity supported c. 1,400 individuals in 2014/15.

Source of Research Funding	Year ended 30 Sept 2015
Science Foundation Ireland	39%
Enterprise Ireland	4%
Higher Education Authority	5%
Irish Research Council	7%
Commission of the European Union	21%
Other	24%

### 4.3 Scholarship and Award Success

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

€245 million in funding from government and industry for five new world-class Science Foundation Ireland (SFI) Research Centres was announced in October 2014. Trinity is the lead institution for two of the centres: 'Adapt,' which seeks to change the way in which enterprises, communities and individuals engage in real time, and the 'CONNECT Centre for Future Networks & Communications,' which aims to develop knowledge in networking services across a wide range of sectors.

Trinity researchers are also partnering in 'iCIRAG,' which sees Principal Investigators (PIs) focus on the geoscience industry so as to maximise Ireland's resource potential while protecting its environment, in 'Lero – the Irish Software Research Centre,' which aims to integrate new engineering advances into highly interconnected, evolving, continuously available systems, and in the 'Cúram Centre for Research in Medical Devices.' The latter seeks to develop 'smart' medical devices to improve the outcome possibilities for patients suffering from chronic diseases and support product development and the formation of spin-out companies.

€14.5 million was awarded to eight Trinity researchers by the European Research Council (ERC) in 2015 for excellence in research, the highest number of ERC grants awarded to any higher education institution in Ireland. Out of a total of the seven ERC Consolidator Grants awarded in Ireland in March 2015, four were made to researchers based at Trinity. Almost €2 million was made available to each of the researchers: Daniel Kelly, Professor in Mechanical and Manufacturing Engineering, Director of the Trinity Centre for Bioengineering and PI at the SFI centre, AMBER; Wolfgang Schmitt, Professor in Chemistry and PI at AMBER; Anna Davies, Professor in Geography; and Ruth Britto, Assistant Professor in Pure and Applied Mathematics which will enable them to consolidate their research teams and develop innovative research. Additionally three Trinity researchers, Mark Ahearne, Research Fellow in Mechanical and Manufacturing Engineering; Sarah McCormack, Assistant Professor in Civil Engineering; and Redmond O'Connell, Ussher Assistant Professor in Social Neuroscience were awarded ERC starting grants of almost €1.5 million each.

These grants are aimed to help researchers in their early career to develop their full potential.

In July 2015, Professor of Environmental History, Poul Holm was awarded an ERC Advanced Grant valued at €2.5 million. This is the only ERC Advanced Grant that was awarded in Ireland and represents the maximum amount of funding available for an individual. The ERC forms part of the EU Research and Innovation programme Horizon 2020.

Trinity was a key partner in two successful multi-million EU bids to tackle ageing and sustainability. In December 2014, the European Institute for Innovation and Technology (EIT) announced the winning consortia for two new Knowledge Innovation Communities (KICs) – large scale partnerships of academic institutions and innovation stakeholders. InnoLife (EIT Health) and RawMatTERS (EIT Raw Materials) are bringing together more than 150 partners from 20 EU Member States to boost innovation and tackle health and raw materials.

Trinity secured €4.7 million through SFI's Investigators Programme for five major research projects out of 23 awards. The SFI Investigator Programme aims to generate impact for Ireland, both societal and economic, through supporting world-class scientific research. The recipients are: Prof Anne-Marie Healy, School of Pharmacy and Pharmaceutical Sciences, Prof Seamus Martin, School of Genetics and Microbiology, Prof Michael Rowan, School of Medicine and TCIN, Dr Marco Ruffini, School of Computer Science and Statistics and CTVR and Prof Stefano Sanvito, School of Physics and CRANN.

Twelve research projects from the Trinity School of Medicine received a total of €3.8 million in funding when the Health Research Board and Minister for Health announced €13.5 million for research into cancer, antibiotics and other vital treatments in November 2014. The awards were given to research projects areas across the School of Medicine including ageing, health insurance, depression, cancer, problem drinking, rheumatoid arthritis, blood disorders, Alzheimer's, psoriasis, stomach infections and Galactosaemia.



Trinity's new Royal Irish Academy members Professor David Coleman (first from left), Professor Orla Hardiman and Professor Jonathan Nesbit Coleman with Professor Mary E Daly, President of the Royal Irish Academy (second from right), and Professor Ruth Byrne (second from left)

ERC Research Professor in the Schools of Chemistry and Physics and PI at AMBER, Valeria Nicolosi, won a 'Proof of Concept' grant from the ERC in January 2015. The €150,000 award is provided to help bridge the gap between frontier nanotech research and the development of related, commercial applications. Prof Nicolosi is using the grant for her project entitled 'Ink-Jet printed supercapacitors based on 2D nanomaterials'.

The Royal Irish Academy (RIA) enrolled three Trinity academics as new members in 2015 in recognition of their world-class contribution to science and the humanities: David Coleman, Professor and Chair of Oral and Applied Microbiology at the School of Dental Science, Jonathan Coleman, Professor of Chemical Physics and a lead PI in the SFI-funded AMBER Centre, and Orla Hardiman Professor of Neurology and Academic Director of the Trinity Biomedical Sciences Institute. Election to the RIA is the highest academic honour in Ireland and is a public recognition of academic achievement.

The Irish arm of a new worldwide project which will dig deep into thousands of DNA profiles in order to discover the genetic causes of Motor Neurone Disease (MND) was launched in Ireland by Prof Orla Hardiman's team of neurologists and geneticists in Trinity in December 2014. With scientists certain that most forms of MND have a genetic basis, a team of international collaborators, including a team from Trinity's newly established Academic Unit of Neurology, have begun an unprecedentedly large scale genetic mapping project called Project MinE, which will map the DNA of at least 15,000 people with MND and 7,500 control subjects (healthy individuals without the disease). The Trinity Neurology team is planning to sequence at least 400 genomes (full DNA profiles) from MND patients and over 200 control genomes from all parts of Ireland.

Prof Luke O'Neill was awarded the prestigious European Federation of Immunology Societies medal for being an 'outstanding European Immunologist' in October 2014. He was nominated for the award by the German Society for Immunology.

Smurfit Professor of Medical Genetics, Seamus Martin, was awarded the RDS *Irish Times* Boyle Medal for Scientific Excellence for improving our understanding of cancer and auto-immune conditions. Prof Martin was chosen for his pioneering work in molecular biology and immunology that has significantly improved worldwide understanding of how cell death is regulated in our bodies and how this malfunctions in cancer, auto-immune conditions and Parkinson's disease.

A team of School of Engineering staff and students was awarded the 2014 Technological Innovation Award for designing a prototype robot to help a teenager born without limbs carry out everyday tasks. The award was received at the annual Engineers Ireland Excellence Awards. The Trinity team created the domestic assistant robot, popularly known as 'Robbie' after they were inspired by a request from Cork teenager Joanne O'Riordan, who suffers from the rare condition of Total Amelia, for someone to build her just such a robot that would help her to lead a normal life.

Trinity researchers behind an innovative science outreach campaign that brought the weird and wonderful world of physics to Dublin's DART commuters won a Realex Fire Web Award 2014 prize for producing the 'best education and third level website' for their *DARTofPhysics* campaign. In 2013, *DARTofPhysics* zapped the curiosities of Dublin commuters through physics adverts placed on Dublin's DART train encouraged commuters to ponder physics phenomena on their way to work, as well as to continue their journey on the campaign website – [dartofphysics.ie](http://dartofphysics.ie).

The *DARTofPhysics* project also led to Dr Shane Bergin, School of Physics and CRANN being awarded the European Commission's Marie Skłodowska-Curie actions achievement award in recognition of his contribution to communicating science in a fun and attractive way and mentoring the next generation in science.

Professor of Comparative Immunology, Cliona O'Farrelly, won a 2014 *Nature* Award for Mentoring in Science at SFI's 2014 Summit. The leading international journal *Nature* hosts these awards on an annual basis to champion the importance of mentoring and inspiring future generations of young researchers.

A project led by Professor of Molecular and Translational Medicine, Yuri Volkov, School of Medicine and AMBER Investigator and Dr Adriele Prina-Mello, Department of Clinical Medicine and AMBER Investigator won the FutureFlash! Best Project competition at Europe's largest nanotechnology Convention the EuroNanoForum 2015 in Latvia, in which they competed against over 1000 projects in this field. The winning project called NAMDIATREAM involves the development of nanotechnology-based tools to enable early detection and imaging of molecular biomarkers of the most common cancer types and of cancer which has spread. It also helps to identify cells which indicate early-stage disease onset.

*Fusion*, a showcase of some of Trinity's world class research took place at a special event in Boston in May 2015. The Provost was joined by the Minister for Education and Skills at the event. In keeping with Trinity's culture of continuous innovation, *Fusion* drew on leading research in Irish History, Immunology, Ageing, Creative Technologies, Nanoscience and Social Sciences presented by some of Trinity's top academics in an engaging TEDx style. It showcased the global, societal and economic impact of this research in a distinctive US setting.

Two Trinity academics were among the inaugural recipients of the 2014 'Teaching Hero' awards in Irish Higher Education in October 2014. Dr Nicola Marples, Department of Zoology, School of Natural Sciences and Prof Stephen Connon, School of Chemistry were recognised as Teaching Heroes by their students in the first National Teaching Hero Awards. The awards were established by the National Forum for the Enhancement of Teaching and Learning in Higher Education in partnership with the Union of Students in Ireland and other student bodies to recognise and celebrate students' experiences of great teaching throughout all higher education institutions.

Prof Thorri Gunnlaugsson, School of Chemistry and Trinity Biomedical Sciences Institute was awarded the 'Institute of Chemistry of Ireland Annual Award for Chemistry' for 2014. The award is made annually to a distinguished chemist with an international reputation, able to relate and communicate the importance of chemistry and chemical research to everyday life.

Thomas Guillerme, researcher in the Department of Zoology won his division of the 2014 British Ecological Society's Photo Competition. His prize-winning picture featured six ladybirds huddling close together on a barbed wire fencepost on a crisp, cold January day in the Wicklow Mountains.

School of Natural Sciences staff and students won the title of 'Best Science and Technology Blog' at the Irish Blog Awards for their online engagement efforts as 'EcoEvo@TCD' ([www.ecoevoblog.com](http://www.ecoevoblog.com)). Covering a wide range of ecology and evolution-related research and science news the blog gives regular updates on current research in the School from diverse areas including plant-pollinator networks, animal behaviour, parasitology, ecosystem stability, palaeontology and biodiversity research.

In April 2015 the inaugural Global Engagement Awards were presented by the Provost, Dr Patrick Prendergast, in recognition of contributions by staff to global education, cultural understanding and global experiences that directly benefit the Trinity community. The awardees were Dr Roger West, School of Engineering, Dr Lorna Carson, Trinity Centre for Asian Studies, and Prof Mac MacLachlan, Trinity Centre for Global Health.

Trinity's Zoological Museum was awarded full accreditation by the Museum Standards Programme for Ireland in July 2015. The museum is the first of its type to receive this prestigious Heritage Council award, which was presented by Minister for Arts, Heritage and the Gaeltacht. Visitor numbers to the museum reached a 8,000 people from 15 countries in 2014/15.



Recipients of Trinity's 2015 Global Engagement Awards, Professor Mac MacLachlan, Dr Lorna Carson and Dr Roger West

## 5. Innovation and Commercialisation

Trinity Research & Innovation (TR&I) promotes and manages the interface between Trinity researchers, funding agencies and industry, through the Research Development Office, the Contracts Office, the Office of Corporate Partnership and Knowledge Exchange, and the Entrepreneurship Office.

The Office of Corporate Partnership and Knowledge Exchange (OCPKE) was established in March 2014 in order to facilitate increased engagement with industry. The mandate of the OCPKE is to implement Trinity's new Industry Engagement Strategy in addition to the existing technology transfer office (TTO) functions of management and appropriate commercial exploitation of all research-derived Intellectual Property (IP) and fostering the creation of campus companies.

### 5.1 Research Funding

During the 2014/15 academic year, 1,320 research funding applications, with an associated value of ca. €444.6 million (not including institutional overheads from SFI and EI) were supported by the Research Development Office.

In the same period, 712 new research contracts were awarded to Trinity with a combined total value of €119.8 million; and Trinity awarded 194 contracts (worth €36.6 million) to external entities.

### 5.2 Intellectual Property

The OCPKE received 53 disclosures of novel intellectual property created by Trinity researchers, filed 18 new patent applications, and granted 23 commercialisation licences. The formation of three new Trinity campus companies was approved. Fifty-five collaborative research agreements were concluded and €25,000 was contributed by industry partners to each collaborative research agreement.

### 5.4 Launchbox

Eleven new teams of budding entrepreneurs participated in Trinity's student start-up accelerator, LaunchBox, now in its third year. Eight teams received funding, in addition to office space and mentorship from successful entrepreneurs. Three more boot-strapped teams received programme support without the funding. All teams had access to space and facilities to test out new ventures. The accelerator programme focused on product validation, product development and future strategy. This year Launchbox progressed from a three-month accelerator to a 12 month programme which includes an 'idea workshop' series and a pre-accelerator element to help potential applicant teams develop from early idea to prototype stage. LaunchBox is supported by Trinity 'Angels' (a business network made up of alumni and friends of Trinity) and Citi Group, the 2015 programme sponsor.



Francis Yates, John O'Reilly and Joseph Lanzillota of Blazer, LaunchBox programme 2015

	2012/13	2013/14	2014/15
Invention disclosure forms	48	58	53
Patents	16	23	18
Licences	9	30	23
Campus or Spin-out companies	5	4	3



## 6. Human Resources

During 2014/15 the Human Resources (HR) unit went through significant transformation to develop the function's infrastructure and capability to support the University's strategic plan. This involved reviewing and realigning the HR Strategy and restructuring the HR team. A new HR Operating Model was embedded comprising three components: Centres of Expertise, HR Operations and HR Partners. In addition, the Financial Services Division Payroll team migrated to HR.

A new 'one stop shop' HR Service Centre was launched in July 2015, solving nine out of ten queries immediately. Throughout the year HR provided professional change capability support to a wide range of change projects across campus as well as handling promotions, induction, training, probation and retirements.

The key challenge was to ensure that the University's human capital requirements were met in a manner that supported growth and delivered service in a more efficient and cost effective manner; this is a journey that will continue into 2015/16 and beyond.

### 6.1 University Staff

The Recruitment and Contracts Section handled appointments across the full range of University activity, from Chairs, Senior Lecturer-Consultant and academic appointments to technical, administrative and executive grade staff, including appointments in academic support units, facilities and student services. Two hundred and ninety-two recruitment competitions to fill 300 posts were managed, an increase of 51 from the previous academic year. At the end of the year, 275 posts were successfully filled which is a 92% success rate (and there were various reasons for competitions not proceeding including eight competitions were withdrawn during the process, 15 competitions yielded no successful candidates and two candidates declined to accept the offer of employment).

It should also be highlighted, as in previous years, that the foregoing recruitment activity occurred against the background of (a) each approval being considered in the context of the general provisions of the Employment

Control Framework (ECF) in relation to essential posts, and (b) the University achieving its ECF target in core staffing of 1,656 full time equivalent posts by December 2014, a reduction of 11 FTE on the 2013 target.

The ECF expired in December 2014 and no staffing target was issued to the University by the HEA for 2015. The principles of the ECF continue to apply. The provisions of the Haddington Road Agreement on adjustments to salary, incremental progression, pension related deduction, overtime rates, exam payments and additional working hours were implemented in the period.

### 6.2 Professor Appointments

2014/15 was a busy year for professorial recruitment with Professors appointed across the University. The Faculty of Arts, Humanities and Social Sciences had two new Professors commence in post at the beginning of January 2015, a Professor of Music and Professor of Business Studies while the Faculty of Health Sciences had one new Professor commence in post in 2014/15, a Professor of Clinical Medicine. The Faculty of Engineering, Mathematics and Science successfully recruited three new positions: two Professors of Computer Systems and a Professor of Inorganic Chemistry, all of whom started in the academic year 2014/15.

### 6.3 Senior Administrative Posts

In 2014/15 three senior administrative appointments were successfully concluded and two commenced in post during this period: the Chief Operating Officer and the Director of Public Affairs and Communications. The recruitment for the new Director of Human Resources concluded during this period and the appointee started in the new academic year 2015/16.

## 7. University Initiatives and Key Events

There were several new initiatives and key events in Trinity during the academic year 2014/15.

The Taoiseach, Enda Kenny, TD launched Trinity's new Strategic Plan 2014-19 in October 2014 which aims to deliver for Ireland as a global leader in education, research, innovation, and that will enable job creation. The five-year plan will cost €600 million and will be funded in large part from non-exchequer funding. The plan's objectives are to increase student enrolments from outside the EU from 1,580 to almost 3,000, new student residences for 2,000 students, increase student online learners to 1,000 and to place Trinity as a creative arts catalyst in Dublin city along with the development of three new major capital projects: Trinity Business School; E3 – Engineering, Energy and Environment Institute; and the Cancer Institute at St James's Hospital which will drive excellence in research for the benefit of society. The plan's nine goals cross all our commitments in research and education, innovation and entrepreneurship, creative arts and global relations, and public and community engagement.

In honour of the Trinity College Dublin students, staff and alumni who lost their lives in World War I, a memorial stone at the Hall of Honour, Front Square was unveiled at a special ceremony in September 2015. Thousands of Trinity students, staff and alumni fought, and 471 died, in military service during the Great War. Those who died are remembered in Trinity's Hall of Honour which acts as the entrance of the 1937 Reading Room. It was decided that one of the key Decade of Commemorations events for the University would be the commissioning, installation and unveiling of a memorial stone in front of the Hall of Honour, drawing attention to nature of the building behind it.

The Trinity Creative Challenge was launched in spring. Artists were invited to propose interdisciplinary projects with a Trinity focus, with the aim of catalysing the arts in Dublin city, and supporting the development of the creative and cultural industries sector. Five proposals were selected from over 140 applicants to share the award fund of €40,000. The five projects include performance, visual art, music, film, design, new media, animation, gaming and creative technologies. All involve a collaboration with Trinity.

In July 2015 Blackstone Charitable Foundation announced the first international expansion of its campus entrepreneurship programme, Blackstone LaunchPad, to Ireland. The three-year, €2 million grant will establish a partnership between NUI Galway, Trinity, and UCC to introduce entrepreneurship as a viable career option and provide over 50,000 students, regardless of course, with a network of venture coaches and an entrepreneurial support system. The announcement was made in Trinity by the Taoiseach Enda Kenny TD and US Ambassador to Ireland, Kevin O'Malley. With a physical presence on each university campus and access to the Blackstone LaunchPad Global Network Technology Platform, the programme has the potential to generate some 1,500 new ventures and 3,700 new jobs across Ireland over the next five years.

Trinity marked its 500th invention disclosure at a special event showcasing the impact of some key inventions and the potential of the University's latest invention technologies in October 2014. The showcase event was opened by Minister for Skills, Research and Innovation, Damien English.

Over €1.6 million was raised through the 2014 Ice Bucket challenge phenomenon. It was planned that 25% of the final figure was to be given to Trinity's internationally recognised Motor Neurone Disease (MND) research group led by Prof Orla Hardiman for clinical research into causes and treatments for MND. However, in January 2015 the Irish Motor Neurone Disease Association decided to provide €600,000 - over 37.5%, of the total amount raised to Prof Hardiman and her team in Trinity for clinical research into causes and treatments for MND. The disease affects about 300 Irish people, with some 110 new cases reported each year. This devastating disease causes inexorable decline of the motor neurones and death within three years of first symptoms in most people.

On the morning of 20 March 2015 hundreds of people gathered in Trinity's Front Square to witness the near-total solar eclipse. Associate Professor in Physics, Peter Gallagher and colleagues organised ECLIPSE 2015. Despite the inclement weather, the crowd glimpsed a partial eclipse thanks to high-tech telescopes and specially designed eclipse shades.

On-going annual synergies with national events included Trinity welcoming the public on campus for Culture Night in September and Open House in October. As part of the Dublin's New Year's Eve festival, Trinity's front façade was lit up with animated illuminations, and again for St Patrick's Day.



*Panti Bliss at the official launch of Discover Research Dublin 2015*

Panti Bliss swung open Trinity's iconic Front Gate for the official launch of Discover Research Dublin 2015. Organised by Trinity and the Royal College of Surgeons in Ireland, the event allowed the public to get up close and personal with the world of research. With 66 separate exhibits, and using a variety of digital and traditional formats, Discover Research Dublin featured something for everyone: 3D visualisations of the brain, colourful visualisations of music played with magnetised instruments, real-time experiments to find out which bacteria live in our mouths, behind the scenes at the Trinity Biomedical Sciences Institute, and much more.

The One Young World Summit in October 2014 saw 1,300 young leaders from across the world gather in Dublin to debate, formulate and share innovative solutions to current global challenges. Trinity, as one of the official partners of the Summit, hosted two break-out sessions on campus, one on youth entrepreneurship and one associated with the Science Gallery.

Trinity welcomed many dignitaries during the year on separate visits including the German President, Joachim Gauck in July as part of a three-day state visit to Ireland, the French Prime Minister Manuel Valls, Speaker of the US House of Representatives, John Boehner, the Chief Secretary for Administration of Hong Kong, Mrs Carrie Lam, astronaut Cmdr Chris Hadfield and many ambassadors.

Career Pathways, a transition to employment service for students and graduates with disabilities was launched. Established by the Disability Service and the Careers Advisory Service with the support of the Genio Trust Fund, the service has now been rolled out to other higher education institutions. The purpose of Career Pathways is to enable students with disabilities to reflect upon and gather their work experiences throughout college; to explore their career options; to enhance their awareness of their needs; and to support them in managing their disability within the workplace.

Trinity College Library Dublin purchased the most extensive collection of Samuel Beckett letters (347 in number) ever to have been offered for public sale in October 2014. It now holds the largest collection of Beckett letters of any research library in the world.



*Seamus Heaney Professor in Irish Writing, Professor Chris Morash, Keeper of Manuscripts, Dr Bernard Meehan and College Librarian and Archivist, Helen Shenton with some of the Samuel Beckett letter purchased by Trinity College Library Dublin*

In February 2015 Trinity signed up to a nationwide charter, pledging to promote gender equality in advancing women’s careers in science, technology, engineering, mathematics and medicine (STEMM) employment in academia. In a major national initiative supported by the Higher Education Authority, the Athena SWAN Charter was expanded to Ireland when Trinity joined six other Irish universities, as well as 14 institutes of technology and the Royal College of Surgeons, in signing up to the charter.

The first national ‘College Awareness Week’, founded by TAP Programmes Manager, Kathleen O’Toole-Brennan, took place in November 2014. This awareness raising campaign involved schools, libraries, businesses and further/higher education institutions. More than 360 activities were organised during the week and the Tánaiste spoke at the launch. The campaign had multi-sectoral leadership including the HEA, NAPD and IBEC.

Led by Trinity, ‘Hello Brian’, an online resource, encourages everyone to improve brain health through entertaining short videos and a smart phone app with

brain-boosting activities and a social media campaign. The innovative and multilingual website promoting brain health was launched in September 2014 as part of a new EU Commission initiative to increase the societal impact of brain research. The campaign is helping the general public understand how their brain works, what science is discovering and to raise public awareness of the importance of investing in brain health to help support independent living in our older years.

A new online history resource ‘1641 Depositions Bridge 21 Website’ for second level students was created by a team of historians in collaboration with educational innovators Bridge21 at Trinity. The Secretary General of the Department of Education and Skills, Seán Ó Foghlú, launched the website that contains 21st century learning activities around the 1641 Depositions, one of the most controversial sources in modern Irish history. They comprise a collection of 8,000 witness statements taken during the 1640s and 1650s – a period of extreme violence throughout the island of Ireland. The website is designed to bring the 1641 Depositions into the classroom as digital resources to be read in their original form.

## 8. Capital Development Programme

### 8.1 Completed Projects

#### *New 24-hour Student Study Hall*

A new 24-hour student study hall was officially opened in October 2014. The 24-hour library study facility, called Kinsella Hall, accommodates 600 students for use throughout the year in the Ussher Library. The specially designed space comprises three floors for all students and researchers in Trinity to access day and night. The development was made possible through the generous private support of the Chief Executive of Jones Engineering Group, Eric Kinsella and his wife Barbara. The student study hall is named in honour of Mr Kinsella's parents, William and Kathleen Kinsella.

#### *Refurbishments and upgrades*

##### *Sports facilities*

In September 2014 Trinity Sports launched the new international standard water based hockey pitch at the University's Santry Sports grounds bringing it to the highest International Hockey Federation global standard available allowing Trinity to host international games. This facility is the first phase of a larger development at the 34 acre site in Santry, the result of which will provide much needed facilities for Trinity student clubs as well as access and community benefit for local clubs, groups and individuals. Three "3G" surface 5-a-side cages will open and the new gaelic pitch is in its final growing phase for use in September 2016.

Trinity saw the return of rugby to College Park in October 2014 when the rugby pitch reopened following four months of closure during resurfacing work which now provides a state of the art natural grass turf pitch. The development was completed with the installation of floodlights.

##### *Cobblestones Restoration*

Trinity's Estates & Facilities Department conducts restoration and building conservation projects throughout the year, but the most noticeable in 2014/15 was the cobblestones project in Front Square. The

cobbles are strongly associated with the character of Trinity and limestone cobbles themselves are extremely durable. However, the material keeping them in place and filling the gaps in between deteriorates over time and can cause difficulties as the surface is uneven. The project included removing the existing stones and pointing material, relaying the stones in a new sand bed, re-pointing, new drainage, areas for ramps and smoother surface tracks and each cobble is re-laid by hand. Further cobblestone projects will take place in the coming year.

##### *Dunlop Oriel House*

This unique red brick building, with strong ties to the volunteer efforts during the 1916 rising, underwent a façade refurbishment to conserve the brick, pointing and features.

##### *ADAPT*

Appearing on national news, a significant refurbishment of space in the O'Reilly Institute was completed for the Adapt Centre for Next Generation Localisation, increasing capacity for research in this area from 61 to 78 research stations.

##### *The West Front*

All of the windows in one of Trinity's most iconic facades, the West Front (overlooking College Green), were individually refurbished and serviced to ensure the internal spaces can continue to be used as a modern office and student societies area, while maintaining this important historic building.

Further restoration projects are planned for execution in the coming years as funds allow. A continuing effort in energy management and environmental care, including great attention to the grounds and gardens, continues each year, carried out by Trinity's dedicated projects and facilities teams.

## 8.2 New Developments

### *Trinity Business School*

This project will provide a new and expanded Business School together with a Innovation & Entrepreneurship Hub on Pearse Street incorporating the site of the Luce Hall (former Sports Centre). The project, spanning 11,000 sq.m., will include a 600-seat auditorium, restaurant spaces for 200 people, public space where students can meet and ideas exchange, 'smart' classrooms with the latest digital technology, and a rooftop conference room. Enabling work to vacate existing buildings on the site started in the second half of 2014 for construction to start in 2016.

### *E3 - Trinity Engineering, Energy and Environment Institute*

This project was paused in late 2011 and an academic review of the proposed activities was undertaken. In late 2013 an interim project steering Committee was established to prepare a brief, a business case and fundraising strategy for the project. Plans are now progressing with potential sites and the preparation of detailed briefing and business case material for project funding and consultant procurements.

### *Residential Accommodation*

Renowned architects, McCullough Mulvin Architects, were engaged in May 2015 to design a new building on Pearse Street on the site of the Oisín House Social Welfare offices building owned by Trinity. This project will bring approximately 280 additional bed spaces in 2018, subject to planning. Other projects to increase bed spaces on Trinity properties are under investigation.

### *Institute of Population Health, Tallaght*

The Board of the College has approved the purchase of three floors of a completed building in Tallaght, adjacent to the Hospital, to provide some 2,500 sq.m of accommodation for the Institute of Population Health. This facility for the School of Medicine in Tallaght provides a collaborative space in a shared building with a HSE primary care centre and local GP practices.



*Book of Kells Exhibition*

### *Trinity Visitor Experience*

A major project is in briefing stages to improve the Trinity Visitor Experience, from point of entry to the campus to departure and to encourage more active and continued engagement with the treasures of Trinity. This project comprises several sub-projects, including improvements to the Nassau Street Gate, increased capacity and facilities at Regent House (front gate), the movement and increase in the shop facilities, increases to the Book of Kells and associated exhibition spaces, queuing and ticketing. Many of these projects are being conducted in sensitive conservation environments, in terms of material held in the area and the buildings involved.

### *Electrical Infrastructure*

A multi-million euro project to increase the maximum import capacity for the University, and to combine multiple existing supplies into one, is in the design phase with ESB Networks and our professional teams. To boost the portfolio of sports facilities and respond to ever increasing demands, further developments are planned for the Fitness Theatre, the sports pitches at Santry, the Boat House facilities and on-campus sports facilities in the new development of Oisín House.

### 8.3 Energy Conservation

In 2014/15 Trinity College consumed 36.3 million kWh of electricity (1.5% reduction from 2013/14) and just over 45 million kWh of natural gas and oil (6% increase from 2013/14). Efforts to manage electricity on the main city centre campus were again successful with electricity consumption falling by 2.9%. The overall electrical outcome is a success as the figures include electrical consumption for a number of new areas including the Business School, the Clinical Research Facility (CRF) in St James's Hospital and part School of Nursing (IDS TILDA & MAMMI) in 2 Clare Street. The increase in gas and oil consumption is related to multiple factors. The year 2014/15 was notably colder than the previous year. The colder year creates more challenges to manage schedules to meet occupancy demands. Despite this correcting the annual consumption for the impact of the colder weather the gas and oil consumption fell by the equivalent of 4 million kWh.

During 2014/15 efforts continued to monitor and reduce energy consumption in the largest research and science building, the Trinity Biomedical Sciences Institute (TBSI). This energy conservation project has reduced the combined electricity and gas consumption in TBSI by a weather corrected 5% since the previous year. This has been achieved by managing operating schedules to meet occupancy demands and utilisation of the Combined Heat and Power (CHP) plant to reduce imported electricity and recovery of waste heat to heat the building.

Throughout the year several projects were completed to improve energy efficiency. This included energy efficient lighting and LED lighting in Goldsmith Hall, the Burke Theatre, the Arts Building concourse, the Nassau Street car park and several others. Several refurbishments including the Anatomy Building, 190, 193 & 194 Pearse Street and areas of the O'Reilly building have been retrofitted to improve energy efficiency. This project work has upgraded the heating installation, expanded the Building Management System (BMS), improved ventilation, high efficiency lighting and new automatic lighting controls.

A new pilot energy awareness campaign was commenced in Goldsmith Hall which is a mixed use building with 200 student residences, administration and teaching spaces. This campaign was run in conjunction with the Office of Public Works (OPW). The campaign was well supported by the student population and will be piloted in other locations during the coming year. Trinity continued to work with the inter-university energy project, e3, comprising Trinity, UCD, DIT and DCU. The project monitors energy consumption for the larger buildings to target energy reductions by optimising operations and controls. College wide email communications were issued during the year to highlight energy awareness within the University.

The current energy conservation target is linked to the current National Energy Efficiency Action Plan 2 (NEEAP 2). The national public sector programme is to reduce primary energy consumption by 33% by the year 2020 measured against a base year. The Energy Performance Index (EnPI) used by the University is primary energy per research equivalent area per annum. The most recent report confirms the energy intensity as measured by the EnPI has reduced (improved) by 19% since the benchmark year. The objective is to continue to improve the EnPI by approximately 3% each year to reach the target of 33% by year 2020.

The net expenditure for the year 2014/15 for utility cost amounted to €6.64 million (€6.6 million for 2013/14). Electricity prices were similar to the previous year. Gas prices reduced but overall cost was offset by the weather dependant increase in gas consumption. All electricity and gas supplies were procured via the national frameworks set up by the Office of Government Procurement (OGP). This project utilises the larger collective procurement power of similar university sector bodies to secure the most competitive unit energy prices in the market place.

## 9. Philanthropy

Trinity's ambitions and achievements are constantly growing and it is essential that it maintains its reputation as a university of global consequence. Great universities cannot rely exclusively on state funding and support from alumni and friends allows the University to achieve excellence in its areas of strength and open up opportunities for many who would otherwise be excluded.

To this end, Trinity Development & Alumni raises funds from the University's alumni, supporters and friends. In the period 1 October 2014 to 30 September 2015, in excess of €53.3 million was secured in pledges (€15.1 million in 2013/14). The benefits of this private support can be seen throughout the University.



Science Gallery Dublin

Pledges and gifts secured by Trinity in the year ended 30 September 2015 were allocated into five main categories: Capital - €29.3 million; Research - €18.7 million; Posts - €3.6 million; Studentships and Scholarships - €900,000 and Student Experience and Outreach - €800,000. Thanks are due to the many donors who have contributed through the Annual Appeal, by leaving a legacy of providing direct support to one of Trinity's strategic priorities which include:

- Ageing
- Cancer
- Neuroscience
- E3, Trinity's Engineering, Energy and Environment institute, a major new engagement between Engineering and Natural Sciences
- Refurbishment of the Library with expanded Humanities research facilities
- Building an Innovation Campus – incorporating a new Business School
- Science Gallery
- Trinity Access Programmes and bursaries for students.

In 2014/15, 2,676 alumni donors gave back to Trinity, a 12% increase on 2013-2014; 1,198 donors gave a gift for the first time, an increase of 37% from the previous year, 45 countries were represented by donors and volunteers, and Trinity welcomed six new 'Benefactors through the Centuries' - donors who have contributed over €1,000,000 to the University.



## 10. Financial Position

The Consolidated Financial Statements for the year ended 30 September 2015 were approved by the Board on 23 March 2016. The summary financial position is set out in Table 1 below.

**Table 1 – Summary Financial Position**

	2015 €m	2014 €m	2013 €m	2012 €m	2011 €m
State grants	44.5	47.3	54.5	58.7	66.7
Academic fees	128.9	124.2	116.1	113.8	111.9
Research grants and contracts	85.2	78.0	74.7	75.9	78.5
Other income	52.4	49.2	50.6	49.5	44.8
Endowment and investment income	10.2	15.8	9.3	11.0	10.1
Income (excluding grant amortisation)	321.2	314.5	305.2	308.9	312.0
Staff costs	230.7	225.7	221.8	220.9	219.6
Other operating expenses	94.5	89.4	87.6	92.4	84.3
Total operating expenses	325.2	315.1	309.4	313.3	303.9
Operating (deficit)/surplus before interest costs and net depreciation	(4.0)	(0.6)	(4.2)	(4.4)	8.1
Less:					
Depreciation (net of grant amortisation)	16.0	17.0	14.1	12.0	13.0
Interest payable	4.1	4.2	4.2	4.8	4.1
Deficit for the year	(24.1)	(21.8)	(22.5)	(21.2)	(9.0)

A combination of strong student recruitment, increasing research activity and a significant contribution from ancillary activities helped to deliver consolidated income, excluding grant amortisation, for 2014/15 of €321.2m (2013/14: €314.5m) which represents an increase of 2.1% on the prior year. Consolidated expenditure, excluding depreciation and interest payable, for the year amounted to €325.2m (2013/14: €315.1m).

Consistent with our plans, the Consolidated Financial Statements for 2014/15 report an operating deficit before net depreciation and interest costs of €4.0m which reflects the University's upfront investment in approved income generating strategies. The total planned deficit of €24.1m reflects the University's provision for infrastructure renewal by way of a net depreciation charge of €16.0m.

As reported in the Consolidated Balance Sheet, the net assets of the Group amount to €887.2m at 30 September 2015, a decrease of €22.1m since 2013/14. The Group has

cash balances of €178.6m at 30 September 2015 (2014: €169.7m) and a €75.0m loan facility with the European Investment Bank, all of which was drawn down at 30 September 2015. The University complied with all of its bank covenants at the year end. Post year-end, on 1 October 2015, a second EIB loan in the amount of €70.0m was drawn down which will fund future capital projects including the new Business School and Oisín House student accommodation developments.

The level of research activity for 2014/15 recorded in the Consolidated Financial Statements (measured on the basis of expenditure activity during the year and not income received) amounted to €85.2m (2013/14: €78m). The value of new awards entered into in the year amounted to €105m, an increase of 57% on the prior year (2013/14: €67m). Trinity was the most successful Irish institution under the EU Framework 7 Programme and has had a successful start to Horizon 2020 particularly with grants from the European Research Council.

In 2014/15 the Exchequer/non-Exchequer split of research income was 65:35 (2013/14: 66:34). The research environment remains very competitive and current projections for research income to remain at c.€85m over the next 3-4 years are dependent on the continuing success of the Research Diversification Strategies (which focus on EU, Industry and other non-Exchequer funding).

The Key Performance Indicators in Table 2 reflect the progress being made by the University to sustain financial health in the short, medium and long term in the face of external volatility.

The University continues to face a number of challenges given the significant decline in State funding for higher

education in recent years, which appears to have now stabilised based on the small increase in the 2016 Grant Allocation. Similarly the prevailing low interest rate environment has significantly eroded interest income for the University in recent years. In this challenging environment the University must continue to manage its cost base, particularly its pay costs. In addition, given the low level of funding for capital purposes from the State, the University must now recognise the need to provision for the cost of infrastructure renewal across the existing campus and for all new capital developments from its recurrent budget.

A significant step-up in income from the Global Relations and Commercialisation Strategies is forecast in 2015/16 and beyond which needs to be closely monitored to ensure a return on investment for the University.

Currently the University plans its recurrent resource allocation to deliver balanced budgets, however after allowing for continued investment in approved income generation and cost reduction strategies and provision for asset renewal, the University will report reducing deficits for the next 3-4 years. Having taken account of the significant growth in non-Exchequer revenue the University's capacity to return to surplus in 2018/19 is ever more challenging given its limited ability to manage pay costs. Whilst the University's Planning Group and Finance Committee regularly review the financial forecasts to ensure key milestones are being achieved we cannot be complacent

**Table 2 - Key Performance Indicators (KPIs)**

Strategic Plan KPIs	Target 2019	2015	2014	2013	2012	2011
Operating (Deficit)/ Surplus % of income*	<b>6%</b>	-1.2%	-0.2%	-1.4%	-1.4%	2.6%
Total (Deficit)/ Surplus % of income*	<b>2%</b>	-7.5%	-6.9%	-7.4%	-6.9%	-2.9%
Exchequer /Non- Exchequer Income Ratio	<b>40:60</b>	43 : 57	45 : 55	48 : 52	49 : 51	54 : 46
Pay/Non Pay Ratio**	<b>65:35</b>	71 : 29	72 : 28	72 : 28	72 : 28	73 : 27
Net Assets	<b>€800m</b>	€887m	€909m	€916m	€938m	€946m
Endowment Fund Value	<b>€180m</b>	€169m	€165m	€147m	€140m	€125m

\* Excludes amortisation of Capital Grants  
\*\* Excludes depreciation and interest costs

education in recent years, which appears to have now stabilised based on the small increase in the 2016 Grant Allocation. Similarly the prevailing low interest rate environment has significantly eroded interest income for the University in recent years. In this challenging environment the University must continue to manage its cost base, particularly its pay costs. In addition, given the low level of funding for capital purposes from the State, the University must now recognise the need to provision for the cost of infrastructure renewal across the existing campus and for all new capital developments from its recurrent budget.

The University is focused on key areas of non-Exchequer income generation (online education, international students, commercialisation, philanthropy, research diversification and industry engagement) to diversify and grow the University's income streams and in doing so, improve our financial sustainability. To address the divergence between escalating enrolments and the decline in Government funding in the sector the University has targeted an Exchequer/non-Exchequer income ratio of 40:60 by 2018/19. The key growth strategies, in which the University has invested over recent years, are progressing well albeit they are in the early stages.

and must continue to critically challenge our existing cost base and review investments in our income growth strategies to deliver a return to surplus.

Given the ambition and scale of the University's Strategic Plan 2014-2019, there is a need to focus on and prioritise major projects and adopt a coherent approach to deliver the key projects as envisaged in the Plan. Achieving our objectives will require rigorous financial management, continued income diversification and maximisation of our funding base. In the years ahead, there is no doubt that the future financial environment will continue to provide significant challenges to the University, however the risks will be mitigated by the University's clear planning framework for sustainable operations, with the University needing to be able to support capital and infrastructure investment and fund loan repayments. It is recognised that the generation of sustainable surpluses is essential to provide the flexibility necessary to invest in the new academic initiatives that the University's ambition requires for it to compete on the international stage.

## Appendix I

### Attendance at Board meetings 2014-2015

The total number of meetings held during the 2014-2015 year was 12.

#### *Ex-officio members:*

Provost (Dr Patrick Prendergast) (12), Vice-Provost/Chief Academic Officer (Professor Linda Hogan) (11), Senior Lecturer/Dean of Undergraduate Studies (Professor Gillian S. Martin) (12), Registrar (Professor Shane P.A. Allwright) (12), Bursar/Director of Strategic Innovation (Professor Gerry Lacey) (12).

#### *Elected members:*

Professor Peter Coxon (10), Professor Sylvia Draper (10), Professor Eileen Drew (10), Professor Brian Lucey (8), Professor John McGilp (12), Professor Cliona O'Farrelly (10), Professor Micheál Ó Siochrú (10), Professor Diarmuid Rossa Phelan (10), Professor William Dowling (11), Mr Dermot Frost (12), Professor Catherine McCabe (12), Professor Desmond O'Neill (8), Professor Aidan Seery (9), Mr Gerard Garrahan (11), Mr Frederick M. Cowzer (11), Ms Sheila Dunphy (10).

#### *External members:*

Dr Olive Braiden (9), Mr Jackie Gallagher (9).

#### *Student members:*

Mr Domhnall McGlacken Byrne (10), Mr Ian Mooney (11), Ms Katie Byrne (9), Ms Megan Lee (9)

## Appendix II

### Board Expenses 2013-14

In 2014-15 the following was paid to Board members (the financial year begins on 1 October):

Prof Des O'Neill: €42.40

## Appendix III

### CONSOLIDATED INCOME AND EXPENDITURE ACCOUNT Year ended 30 September 2015

	<b>2015</b>	<b>2014</b>
	<b>€'000</b>	<b>€'000</b>
<b>Income</b>		
State grants	44,512	47,279
Academic fees	128,872	124,234
Research grants and contracts	85,199	78,004
Amortisation of deferred capital grants	10,571	11,599
Other operating income	52,456	49,178
Interest income	487	866
Other finance income/(expense)	-	-
Endowment income	6,556	7,022
Gain on revaluation of investment properties	3,097	7,881
<b>Total Income</b>	<b>331,750</b>	<b>326,063</b>
<b>Expenditure</b>		
Staff costs	230,713	225,756
Other operating expenses	94,468	89,368
Interest payable	4,059	4,217
Depreciation	26,610	28,554
<b>Total Expenditure</b>	<b>355,850</b>	<b>347,895</b>
Deficit for the year before taxation	(24,100)	(21,832))
Taxation	-	-
Deficit for the year after taxation	(24,100)	(21,832)
Less: Surplus for the year transferred to accumulated income in endowment funds	(1,270)	(1,588)
Deficit for the year retained within revenue reserve	(25,370)	(23,420)



## Appendix IV

### CONSOLIDATED AND UNIVERSITY BALANCE SHEETS Year Ended 30 September 2015

	Consolidated		University	
	2015 €'000	2014 €'000	2015 €'000	2014 €'000
<b>Fixed assets</b>				
Tangible assets	752,452	761,668	752,418	761,620
Investment properties	56,255	46,369	56,255	46,369
	808,707	808,037	808,673	807,989
<b>Endowment assets</b>	168,737	165,113	168,737	165,113
<b>Current assets</b>				
Debtors	50,960	47,916	50,720	47,859
Stock	492	320	492	320
Cash at bank and in hand	25,944	21,677	13,432	10,383
Short term deposits	152,606	148,048	140,000	135,563
Short term investments	1,320	-	-	-
	231,322	217,961	204,644	194,125
<b>Creditors:</b> amounts falling due within one year	(173,136)	(147,528)	(156,503)	(135,900)
<b>Net current assets</b>	58,186	70,433	48,141	58,225
<b>Total assets less current liabilities</b>	1,035,630	1,043,583	1,025,551	1,031,327
<b>Creditors:</b> amounts falling due after more than one year	(148,394)	(134,280)	(148,394)	(134,280)
<b>Net assets excluding pension (liability)/asset</b>	<u>887,236</u>	<u>909,303</u>	<u>877,157</u>	<u>897,047</u>
Pension liability	(1,395,218)	(1,423,616)	(1,395,218)	(1,423,616)
Pension receivable	1,395,218	1,423,616	1,395,218	1,423,616
<b>Net Assets</b>	<u>887,236</u>	<u>909,303</u>	<u>877,157</u>	<u>897,047</u>



## Appendix IV

### CONSOLIDATED AND UNIVERSITY BALANCE SHEETS (continued) Year Ended 30 September 2015

	Consolidated		University	
	2015 €'000	2014 €'000	2015 €'000	2014 €'000
<b>Represented by</b>				
Deferred capital grants	412,907	420,017	412,907	420,017
Endowment funds: Permanent	160,347	156,793	160,347	156,793
Endowment funds: Expendable	8,390	8,320	8,390	8,320
	168,737	165,113	168,737	165,113
Revaluation reserve	342,325	335,536	342,325	335,536
Revenue reserve	(36,733)	(11,363)	(46,812)	(23,619)
	305,592	324,173	295,513	311,917
	<u>887,236</u>	<u>909,303</u>	<u>877,157</u>	<u>897,047</u>



**Trinity College Dublin**  
The University of Dublin



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