



Trinity College Dublin

Coláiste na Tríonóide, Baile Átha Cliath

The University of Dublin



# Annual Report **2018-19**

[www.tcd.ie](http://www.tcd.ie)

**Members of the Board of Trinity College Dublin during the 2018/19 academic year were:**

<b>Ex Officio</b>	
Patrick J. Prendergast	Provost
Chris Morash	Vice-Provost/Chief Academic Officer
Kevin Mitchell	Senior Lecturer/Dean of Undergraduate Studies
Paula Murphy	Registrar
Veronica A. Campbell	Bursar/Director of Strategic Innovation
<b>Elected/Nominated</b>	
Deirdre Ahern	Fellows and Fellow Professors (2016-2020)
Sarah Alyn Stacey	Fellows and Fellow Professors (2016-2020)
Louis Brennan	Fellows and Fellow Professors (2018-2022)
Andrew Burke	Fellows and Fellow Professors (2018-2022)
Jill Donoghue	External Member (nominated by the Institute of International and European Affairs, IIEA)
Sylvia M. Draper	Fellows and Fellow Professors (2016-2020)
Stephanie Farrell	Technical, Administrative and Support Staff (2016-2020)
Darren Fayne	Non-Fellow Academic Staff (2016-2020)
David Grouse	Technical, Administrative and Support Staff (2018-2022)
James Keogh	Technical, Administrative and Support Staff (2016-2020)
Shane De Rís	Student Representative (President of the Students' Union) (2018-2019)
Vacant	External Member (nominee of the Minister for Education and Skills)
Kathleen McTiernan	Non-Fellow Academic Staff (2018-2022)
Rachel Moss	Non-Fellow Academic Staff (2016-2020)
Aimee Connolly	Student Representative (Education Officer of the Students' Union) (2018-2019)
Brian O'Connell	Fellows and Fellow Professors (2018-2022)
James Cunningham	Student Representative (Welfare Officer of the Student's Union) (2018-2019)
Eunan O'Halpin	Fellows and Fellow Professors (2016-2020)
Diarmuid R. Phelan	Fellows and Fellow Professors (2018-2022)
Aidan Seery	Non-Fellow Academic Staff (2018-2022)
Fintan Sheerin	Non-Fellow Academic Staff (2018-2022)
Richard Timoney*	Fellows and Fellow Professors (2016-2020)
Oisín V Coulter	Student Representative (President of Graduate Students' Union) (2018-2019)
<b>In attendance</b>	
Ian Mathews	Treasurer/Chief Financial Officer (in attendance <i>ex officio</i> )
Peter Reynolds	Interim Treasurer/Chief Financial Officer (in attendance <i>ex officio</i> )
John Coman	Secretary to the College (in attendance <i>ex officio</i> )
Geraldine Ruane	Chief Operating Officer (in attendance, by invitation)
Juliette Hussey	Vice-President for Global Relations (in attendance, by invitation)
Victoria Butler	Assistant Secretary to the College (in attendance)

\*Professor Richard Timoney passed away on 2/1/19

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: fishers@tcd.ie)

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## UNIVERSITY ACTIVITIES

### 1. Academic Developments

#### 1.1 World University Rankings

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

Trinity was ranked in 104th place in the world and 35th in Europe in the QS World University Rankings 2019. Trinity was ranked in 120th position in the Times Higher Education World University Rankings 2019.

#### 1.2 Quality

In 2018/19 the Quality Office adopted a focus on strengthening the governance of quality through the development of a series of policies and procedures. Key amongst them was the Institutional Quality Policy Statement (December 2018) that acts as an umbrella policy for activities that fall under Trinity's Framework for Quality; a Procedure for the Quality Review of Dual and Joint Degree Programmes (2018/19) was developed to assure the quality of academic programmes developed in partnership with other higher education institutions in Ireland and overseas. A Procedure for the Conduct of Focus Groups for student evaluation of modules and programmes (May 2019) aims to strengthen evaluation processes of the student experience of teaching and learning. A key feature of the supports put in place to enable this procedure was the delivery of a focus group facilitation workshop to Research Degree students to act as focus group facilitators and therefore strengthen Trinity's initiatives in engaging 'students as partners' in quality assurance activities. Quality Review Procedures for Schools and Academic Programmes and the External Examiner Report template were revised to take account of University Council decisions in respect of the Capstone Project (April 2019) to support the mainstreaming and embedding of TEP Features.

The Quality Office facilitated quality reviews of IT Services, Human Resources, the School of Creative Arts and the Trinity International Development Initiative (TIDI) in 2018/19. The process for approval of Trinity's Linked Providers (Marino Institute of Education (MIE) and the Royal Irish Academy of Music (RIAM)) quality assurance policies and procedures was initiated in 2018/19, under the Approval of Linked Provider Quality Assurance Procedures (June 2018). This is a requirement of Trinity as the Designated Awarding Body for both institutions under the QQI (Education & Training) Act 2012.

A key quality initiative undertaken in 2018/19 was the External Examiner Enhancement Project. The project saw the establishment of a single email address for all incoming external examiner reports facilitating easier monitoring of submission rates; a centralised storage folder for each School providing secure and simultaneous access by authorised School personnel to the reports; and a new External Examiner website providing a single point of information on external examining in Trinity for Schools and Examiners.

Trinity implemented the first full administration of the Postgraduate Research National Student Survey.ie in February 2019, following the pilot survey of 2018. The survey extends to postgraduate research students the opportunity to evaluate their experience of research degree programmes, that has been available to undergraduate and postgraduate taught cohorts since 2014. It allows Trinity to benchmark that experience at a sectoral level with other Irish universities and inform policy and procedure changes such as the introduction of Theses Committees for all incoming PhD students from 2019/20. Survey outcomes will help inform how Trinity's quality assurance of research degree programmes align with Ireland's Framework of Good Practice for Research Degree Programmes, launched by QQI in July 2019.

## 2. Education

### 2.1 The Trinity Community

Trinity is a community of scholars, made up of students, academic staff, administrative and professional 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 18,407 registered undergraduate and postgraduate students in 2018/19. Of these, approximately 72% were from the island of Ireland. In looking at the EU vs nonEU cohorts, 15,161 (82%) were EU, and 3,246 were non-EU (18%). The student population was 60% female and 40% male.

A total of 13,285 (72%) were registered on undergraduate programmes, 5,122 (27.8%) on postgraduate programmes, and 46 (0.2%) on foundation courses.

#### Alternative Entry Routes to Trinity

The University's Strategic Plan aimed to increase the percentage of under-represented groups registered on undergraduate courses to 25% by 2019 and was successful. At present these groups consist of students who are admitted under the Mature Student Dispensation Scheme; the TAP Foundation Courses for Mature Students and Young Adults; the DARE Scheme; the HEAR scheme and FETAC applicants. In 2018, Trinity met its objective of 25% of under-represented groups registered on undergraduate courses (25.5%).

### 2.2 Admissions Statistics

In 2018, Trinity received 7,616 first preference CAO applications – a decrease of 7% on 2017 (8,213), resulting in Trinity attracting 16% of all first preference applications across the sector.

A total of 69,861 applicants applied through the CAO for Level 8 courses in Irish higher education institutions, a decrease of 3% on the 2017 figure of 71,999. In 2018, 17,698 (18,590 in 2017 and 18,518 in 2016) mentioned Trinity as one or more of their CAO course preferences.

Students from every county in Ireland as well as 20 countries worldwide were awarded special Entrance Exhibition Awards in November 2018. A total of 438 students were presented with the high achievement awards for receiving 500 points or more in the Leaving Certificate (or equivalent final examination). This year saw a far greater diversity of schools and students from every county in Ireland in the revised awards scheme. There has been a 54% increase in the number of second level schools from across the island of Ireland (from 245 schools in 2017, to 379 in 2018). Most schools have one student awardee per school which means the diversity of students and schools is far greater. The Entrance Exhibition Awards were awarded to 238 students from Leinster; 51 students from Connacht; 67 from Munster; 60 from Ulster; and 22 international students from 20 counties.

The Trinity Admissions Feasibility Study (TAFS) was launched in 2013 to investigate whether it might be possible to admit students to Trinity using a combination of Leaving Certificate results and supplementary assessments. Twenty-five (25) places were set aside for the study: Law (10 places), History (10 places), and Ancient and Medieval History and Culture (AMHC) (5 places). In 2018, a total of 244 students applied to participate in the Study (244 in 2017, 238 in 2016, 242 in 2015).

## 2.3 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 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 2018/19 academic year 58 students were awarded Scholarships on Trinity Monday 2019. Recipients of the scholarships represented all faculties: the Faculty of Arts, Humanities and Social Sciences (21); Faculty of Engineering, Mathematics and Science (20); and Faculty of Health Sciences (17).

## 2.4 The Curriculum – New Courses

The following undergraduate and postgraduate courses and modules were approved by the University Council in 2018/19:

UG / PG	Name of Course	Degree award
PG	Diagnostic Radiography	M.Sc.
PG	Law and Finance	M.Sc.
PG	Implementation Science	M.Sc.
PG	Innovation and Enterprise Development	P.Grad.Cert.
PG	Managing Risk and System Change	P.Grad.Cert., P.Grad.Dip.
PG	Immunotherapeutics	M.Sc.
PG	Identities and Cultures of Europe	M.Sc.
PG	Healthcare Innovation	P.Grad.Dip.
PG	Economics-International Development (Strand)	M.Sc.
PG	Genomic Medicine	M.Sc.
PG	Environmental History	M.Phil.
UG	Articulation programme in Engineering, with University of Michigan-Shanghai Jiao Tong University Joint Institute	M.A.I. (St.)
UG	History of Art and Architecture	B.A.
UG	Chemistry with Biosciences	B.A.
UG	Dual degree programme in History of Art and Architecture, with Columbia University	B.A.
UG	Dual degree programme in Film, with Columbia University	B.A.
UG	Film – single subject on entry	B.A.
UG	Dual degree programme in Classics, Ancient History and Archaeology, with Columbia University	B.A.

## 2.5 Commencements, Firsts and Gold Medal Awards

A total of 5,585 degrees were conferred (3,273 primary degrees and 2,312 higher degrees) in 42 commencement ceremonies in the 2018 calendar year. Seven-hundred and seventy-six students received first class honours at the degree examinations in 2018/19 and, of these, 171 were awarded Gold Medals.

Honorary conferring took place at the Commencement ceremonies on Friday 7 December 2018 and 18 April 2019. Historian and agent of social change Catherine Corless, major Irish poet Thomas Kinsella and top-cited American physicist Michal Lipson were conferred with Honorary Degrees at the Winter Commencements.

Recipients of Honorary Degrees at the Summer Commencements were ornithologist and environmentalist David Cabot, notable architects Yvonne Farrell and Shelley McNamara, visual arts advocate Carmel Naughton, former legal counsel to the United Nations Patricia O'Brien and eminent Irish economic historian Cormac Ó Gráda.

## 2.6 Trinity Access

Trinity Access offers a range of initiatives aimed at increasing the participation rate at third level of young adult and mature students from under-represented groups. Trinity Access has been working in the area of widening participation since 1993 with a track record of building, scaling and sustaining educational innovations aimed at low income young people and adults.

The programmes focus on educational innovations in outreach, second-level pedagogy, alternative admissions systems to higher education, post-entry support and career development programmes for undergraduates.

Trinity Access is funded by the Higher Education Authority, through the Programme for Access to Third Level Education (PATH), the Department of Education and Skills and several individual and corporate funders for the following initiatives:

- School and Community Outreach
- Pre-University Preparation Courses: *Foundation Course for Young Adults and Mature Students, TCD*
- Partnership Courses in Liberal Arts: *TCD and City of Dublin Education and Training Board (CDETB)*
- Pathways to Law
- Pathways to Business
- Pathways to Technology
- The Post Entry Progression Programme
- Research, Evaluation and Innovation
- Trinity Access 21 Project
- CityWide
- Bridge 21 Transition Year Programme
- College Awareness Week

There were 281 admissions to Trinity through Trinity Access in 2018/19, through alternative entry routes and preparatory programmes.

Trinity Access works with DEIS schools with a legacy of low progression to third level. They work with 70 schools across the wider Dublin area, 40 are closely linked primary and second-level schools and 30 schools are involved with projects such as Citywise, CodePlus, DCC and Schools of Distinction. Trinity Access with the assistance of some 20 Trinity departments, enabled over 8,000 students, parents and teachers to participate in on-campus activities during 2018/19. These include weekly campus tours, mentoring programmes, the Med Day for Junior Cycle students, CodePlus coding classes for girls, a bespoke book writing programme, the Pathways to Law and Technology programmes, as well as maths and science exploration week and summer

schools. They also conducted 1,700 direct teacher engagements through conferences, teachmeets, post graduate courses and teacher fellow programmes.

Trinity Access also provides a range of post-entry support, activities and career development programmes, as well as financial assistance to undergraduate students who have entered Trinity through alternative admissions routes.

Trinity Access collaborated with the Oxford University College, Lady Margaret Hall, to bring their linchpin programme, the Foundation Course, to Oxford in a four-year pilot scheme. The third cohort of students started in September 2018.

The Mature Student Office (MSO) is an integral part of Trinity Access. The MSO supports the recruitment, integration and success of the mature student cohort in the University. In 2018/19 there were 190 mature new entrants. This figure includes students who have progressed from the Foundation Course for Mature Students and mature students from link ETB Colleges (Pearse/Plunket).

This brings the total number of Trinity Access students for 2018/19 to 471.

## 2.7 Provost's Teaching Awards

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 2019 recipients were: Prof Brendan Ciarán Browne, School of Religion – Early Career Award, Prof Conor McGinn, School of Engineering – Early Career Award, Prof Tara Mitchell, School of Social Sciences & Philosophy, Prof Helen Sheridan, School of Pharmacy & Pharmaceutical Sciences, and the Lifetime Achievement Award went to Prof Celia Holland, School of Natural Sciences. All recipients were recognised for their dedication and commitment to teaching and learning excellence.

## 2.8 Online Education

Trinity continued its commitment to online education in 2018/19. From anywhere around the world, students could access a range of Trinity-developed course materials.

Developed as part of University's strategic goals for online education, fully online postgraduate courses have been available since 2014. Many existing courses were updated in 2018/19 to keep learning content current and in line with best practice. A blended Research Methods module was created for the School of Nursing and Midwifery, which enabled a range of MSc students to study content online while preparing for their dissertations.

In support of Trinity Education Project (TEP)'s goal to renew Trinity's undergraduate education, TOSL supported multiple TEP elective modules through the production of digital learning tasks, videos, and interactive multimedia resources for multiple Schools across the college. Pitch videos for the undergraduate TEP elective modules were also created, which enabled academics to effectively communicate the aim and content of their electives to students.

An internal training course on GDPR was developed, as well as a short course on gender equality in third level institutions. The latter was developed for the Trinity Centre for Gender Equality and Leadership and contained interactive multimedia materials and other learning tasks.



Trinity continues to support global-learning communities through the provision of high-quality, open-access courses (MOOCs) in partnership with FutureLearn. In 2018/19, over 33,000 learners signed up for Trinity MOOCs in topics including Irish History, Sustainable Development, Intellectual Disability Nursing and Exercise Prescription. This year also saw the launch of courses on Radiation Therapy and The Book of Kells, the latter quickly becoming one of Trinity's most popular MOOCs.

## 2.9 International Agreements

The number of educational partnerships with universities globally continues to grow and in this academic year approval was given by the University Council for the programme with University of Michigan-Shanghai Jiao Tong (SJTU) Joint Institute, which will enable students to graduate with a MAI Engineering from Trinity and BSc from SJTU.

Building on the success of the dual degree with Columbia University which commenced in 2018, three new programmes were approved in 2018/19 for intake in 2020, namely History of Art and Architecture; Classics, Ancient History and Archaeology; and Film. Discussions on the inclusion of programmes in Sciences are at an advanced stage and the expectation is that these will also be open for intake in 2020.

In June 2019 the European Commission announced the first 17 “European Universities” alliances. CHARM-EU was one of the successful applications. The CHARM-EU alliance is made up of the Universities of Barcelona, Trinity College Dublin, Utrecht, Montpellier and Eötvös Loránd (Budapest) together with associated and support partners including the Irish Universities Association (IUA) and the National agency Quality and Qualifications Ireland (QQI). CHARM-EU stands for a Challenge driven, Accessible, Research based, Mobile European University with a mission to create a sustainable, transferable, inclusive model for a European inter-university campus.

Following on from high level visits in 2017/18, senior delegations from the Sorbonne and the University of Birmingham were received leading to the signing of bilateral agreements to collaborate in research and education programmes as well as staff and student mobility. Academic engagement with the University of Birmingham will focus, in the first instance, on digital humanities, bioengineering and collaboration in medicine through the clinical research facilities in both universities. The strategic partnership with the Sorbonne University will focus on digital humanities, material science, Neuroscience/GBHI, Cancer and Ageing research.

In May 2019, Oxford University announced a major access initiative modelled on the Trinity Access Foundation Course. For the last three years, Trinity Access has worked closely with Lady Margaret Hall, Oxford University, on the development of a pilot Foundation Year for low-income students. This year, Oxford has announced it will now offer up to 50 places to low-income young adults by 2023 under a new initiative called Foundation Oxford, closely modelled on the Trinity Access Foundation Course. It will also offer up to 200 places on Opportunity Oxford, a month-long summer bridging course for students from low-income backgrounds.

Trinity continued to expand college-wide student exchange programmes through signing new agreements with peer universities and plans to increase such exchanges with several key partners. In the last year, new student exchange agreements were signed and/or activated with: Monash University, Waseda University, Nanyang Technological University, American University of Beirut, University Mohammed V Rabat and the University of Florida.

### 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 its students. To enhance the student experience, support services offer a comprehensive range of administrative and support services including Accommodation, Academic Registry, Catering, Student Learning Development, Tutorial Service, the College Health Centre, Counselling Services, Disability Office, the Chaplaincy, Careers Advisory Service, the College Day Nursery and Trinity Sport. 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 2018/19 academic year, students and student societies were successful in many areas. Societies and sports clubs are essential to the Trinity education. Notable achievements and anniversaries this year include:

- The Central Societies Committee welcomed alumni from all around the world for a celebration marking the 50th anniversary of the CSC and its contribution to maintaining Trinity's student community as one of the most vibrant in the world.
- Enactus TCD were crowned the winners of the Enactus Ireland National Competition and went on to represent Ireland at the Enactus World Cup in Silicon Valley, finishing in the top 16.
- The Biological Association raised €56,000 via Trinity Med Day for St James's Hospital, Tallaght Hospital and the National Rehabilitation Centre.
- The EU Commissioner for Competition, Margrethe Vestager took part in a Citizens' Dialogue with the Historical Society and was presented with the Society's Gold Medal.
- The Gold Medal of the University Philosophical Society was awarded to renowned British food writer Mary Berry, Mayor of London Sadiq Khan and the President of Microsoft Brad Smith among others.
- DU Photographic Association celebrated 70 years with their highly successful exhibition entitled 'Celebrating Age'. Ninety photographs from 45 staff and student photographers were showcased on the night.
- Trinity Orchestra - Ireland's only entirely student-run orchestra - performed across a number of Ireland's top festivals including Electric Picnic and the Metropolis festival.
- At the 2019 Student Achievement Awards Ireland, Trinity organisations and individuals were nominated in 12 of the 17 categories - Three of the six nominees in the Student Media Award and 13 of the 17 nominees for Outstanding Contribution to Student Media were from Trinity.

The range of activities that students engage in outside their academic lives is best captured by the Dean of Students Roll of Honour for Volunteering, the Dean's List, and the Dean's Leadership Awards. This year the highest award, the Trinity Legacy Award for Volunteering, was presented to three students, James Cotter of the Voluntary Tuition Programme, Rachel Skelly for the Trinity Consent Education programme, and Phoebe O'Leary from the Ardclough Drama Group. The awards were presented by Sam McGuinness, CEO of the Dublin Simon Community.

Sinead McAleer and Paul Allan struck gold at the world's biggest start-up and entrepreneurship competition. Their company, BOP (Biological & Optical Prevention), secured top honours in the International Track of the "Internet+" Innovation and Entrepreneurship Competition, which was organised by the Ministry of Education,

China, and hosted in Xiamen University. They also won a €50,000 investment fund for a winning pitch on Launch Box's Demo Day for BOP. The product they invented will prevent and treat healthcare associated infections by changing colour depending on the germs present on a surface, eliminating them and completely disinfecting the area.

A Trinity student and a graduate were presented with Climate Hero Awards at the inaugural An Taisce Climate Ambassador awards. Environmental Science student Isabel Jorgensen and Botany graduate Niamh Banahan were among the nine recipients of these prestigious awards.

Two Trinity graduates—Conor McGlynn and Conor O'Meara—are among the 147 individuals that comprise the 2020 cohort of the Schwarzman Scholars, which is one of the world's most prestigious graduate fellowship programmes, located at Schwarzman College at Tsinghua University in Beijing.

Trinity teamed up with international medical organisation Médecins Sans Frontières/Doctors Without Borders (MSF) to host a 12-week hackathon where students worked on providing innovative solutions to some of the problems MSF faces in delivering healthcare to patients around the world. The Trinity Synergy Challenge is a new initiative that brings together researchers and students from the E3 schools of Engineering, Computer Science and Natural Science to develop solutions to global challenges in providing humanitarian aid.

Lyndsay Walsh, a postgraduate student in Trinity's Master in Development Practice programme, won a prestigious international award for undergraduate research that took her to the tropical forests of Mexico. She was the winner of the 2018 Undergraduate Award in the Earth & Environmental Sciences category.

Six Trinity student and alumni-created start-ups tapped into the stateside market as the first ever 'Tangent Pioneers' international accelerator programme launched. The programme will ensure six award-winning start-ups will develop new contacts and mentors in the US while learning how to operate in a very different and more competitive market. The programme is being led by Tangent, Trinity's Ideas Workspace.

A final year Trinity PhD student in Biomedical Engineering, Robert Gaul, scooped two major engineering awards – first prize in the American Society of Mechanical Engineers (ASME) PhD competition for Cardiovascular Mechanics and Cell Biomechanics at the World Congress of Biomechanics, and the Engineers Ireland Biomedical Research Medal.

Trinity Sport announced 66 sports scholars for 2018/2019. Among these athletes were fencer Anna Lee, who was selected to represent Ireland at both European and World Championships at U20; hockey star Erica Markey; women's rower Aoife Corcoran who was part of the senior 8 that won Colours and Trinity Regatta in 2018; Paralympic swimmer Ailbhe Kelly, ranked 5th in the world in the 400m freestyle and 100m backstroke S8 class; Ireland U20 and Leinster rugby players Jack Kelly, Jack Dunne, Michael Silvester and Ryan Baird; and Tighthead prop and Leinster rugby player Linda Djougang.

## 4. Research Activities

### 4.1 Trinity's Research Charter and Living Research Excellence Strategy

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 first ever Research Charter and Living Research Excellence Strategy were launched at a special event in the Douglas Hyde Gallery in June 2019. More than 250 colleagues from across the University attended the launch which served as a celebration of the culmination of an intensive consultative and collaborative process and as an opportunity to celebrate research and the vital role it plays in the life of Trinity. The event featured brief presentations from researchers at all stages of their careers – undergraduates, postgraduates, early career researchers, senior principal investigators – and it showcased musical compositions from Trinity researchers to emphasise that research takes many forms and happens in myriad ways.

#### The Research Charter: seven core principles

The Research Charter and the Living Research Excellence Strategy are the result of a highly collaborative process that started in early 2018. Hundreds of different inputs were received from across Trinity.

A team from the Office of the Dean of Research, headed by the Dean of Research, reviewed the contributions. They identified a real desire, across the university, to reassert and affirm core principles around research and to clearly articulate what matters in terms of how and why we research. The team crystallised the inputs into the seven core principles which form Trinity's Research Charter:

1. Cherish academic freedom, diversity of scholarship, and pursuit of truth.
2. Position research at the heart of Trinity.
3. Foster and grow research talent.
4. Harness our collective expertise for the greater good.
5. Broaden our local and global impact.
6. Engage profoundly with our publics.
7. Stand up for research.

#### Living Research Excellence Strategy: actions

The next phase of the process involved identifying how to 'live' the core principles. What kind of issues might prevent researchers from 'living' these principles? How could the principles become reality? The team embarked upon several months of discussion during which ideas were collected and approaches mapped. This ultimately resulted in the broad actions captured in the Living Research Excellence Strategy:

1. Stimulate and build strategic research collaborations.
2. Make it easier to do research.
3. Generate the research funding and resources we need.
4. Radically revise how we do research communications.
5. Join the dots on all policies relating to our research.
6. Be bold in planning our long-term research future.

The word 'LIVING' was deliberately chosen and included in the strategy's title in order to reflect that this is not a static document, but one that is dynamic and flexible and designed to adapt to the rapidly changing research landscape in which Trinity operates. This is a living, breathing document and its implementation will inevitably identify new challenges and opportunities over time, and there should be scope within the Strategy to address these.

The college-wide consultation process was the foundation on which the entire Charter and Strategy are built. Through engaging the whole Trinity community, the Charter and Strategy belong to everyone in the University and create a sense of ownership which will help to make living the principles of the Charter a reality.

## 4.2 Research Funding

Research activity (measured on the basis of research expenditure) remained broadly consistent for the third consecutive year at €101m (2017/18 €100m). The value of new awards secured in the year amounted to €155m (2017/18: €113m) attracting an average indirect cost rate of 22.6% (2017/18 19.5%). New awards in 2018/19 included a Science Foundation Ireland award of €48m releasing phase 2 funding for AMBER (Advanced Materials and Bio-engineering Research) and is structured within a funding model that is designed to stimulate substantial growth in industry and non-exchequer funding.

Trinity's success in attracting EU funding has continued in 2018/19 with the value of new awards funded under the Horizon 2020 Programme amounting to €27m (2017/18: €24m). Trinity is ranked 33rd in Europe out of over 1,300 HEIs for Horizon 2020 funding with the University having secured 50% of all European Research Council (ERC) awards to Ireland since 2014.

The average contribution to indirect costs from research activity of 17.7% continues to be below the full economic cost of hosting research resulting in the core budget cross-subsidising research activity. This position continues to challenge the University's research support mechanisms and is an annually occurring funding gap that needs to be addressed.

In 2018/19 there were over 1,427 active research accounts lead by 569 Principal Investigators. Research activity supported c2,150 individuals in 2017/18 (1,500 staff: 650 PhD students).

Source of Research Funding	Year ended 30 Sept 2019
Science Foundation Ireland	37%
Enterprise Ireland	6%
Industry	5%
Irish Research Council	8%
Commission of the European Union	19%
Other	25%

## 4.3 Scholarship and Award Success

Trinity staff members continued to excel in research achievements and received national and international distinction and funding. Among the awards received by Trinity researchers were:

Five Trinity academics were elected as new members of the Royal Irish Academy (RIA) in May 2019. Professor of Zoology, Yvonne Buckley, Professor of Architectural History, Christine Casey, Professor of Inorganic Chemistry, Yurii Gunko, Professor of Dermatology, Alan Irvine, and Professor Valeria Nicolosi, AMBER and School of Chemistry were among 27 new members elected for their exceptional contribution to the sciences, humanities and social sciences, and to public service.

Professor of Biochemistry Luke O'Neill was awarded an EU European Research Council (ERC) Advanced Grant of €2.5 million. This is the first time a researcher from Trinity has won a second ERC Advanced Grant, the highest accolade among the ERC awards.

In February 2019, Prof Mary McCarron, Dean of Health Sciences, won the first ever Health Research Board Impact Award. This was in recognition of how her research has transformed the health, care, and living environments of people ageing with Intellectual Disabilities.

Professor of Geography, Environment and Society, Anna Davies, won the Irish Research Council (IRC) Researcher of the Year award in December 2018. In addition to Prof Davies' major award, two postgraduate researchers, Joanna Poetz and Hannah Prendeville, won Medals of Excellence.

Ireland's only six-time ERC awardee, Prof Valeria Nicolosi from AMBER and the School of Chemistry secured an ERC Proof of Concept grant worth €150,000 as a top-up for her ERC Consolidator grant of €2.5 million awarded in 2016, bringing her total research funding awarded in the last 10 years to over €20 million.

Four Trinity researchers won Science Foundation Ireland (SFI) 2018 Science Awards. Research Professor in the School of Chemistry, John Boland, won the SFI Researcher of the Year Award. Assistant Professor in the School of Biochemistry and Immunology, Dr Tomás Ryan, won the SFI Early Career Researcher of the Year Award; Professor in Genetics in the School of Genetics and Microbiology, Jane Farrar, won the SFI Best Reported Impact Award; and RSC Chemistry Education Coordinator in the School of Chemistry, Dr John O'Donoghue, won the SFI Outstanding Contribution to STEM Communication Award.

School of Medicine researchers were awarded funding from the Health Research Board (HRB) and Medical Research Charities Group (MRCG) for projects that will improve the lives of patients living with motor neuron disease, cancer and blindness. The five researchers - Dr Deirdre Murray, Dr Bahman Nasserolelami, Prof Juliette Hussey, Prof Jacintha O'Sullivan and Dr Sarah Doyle - were the successful awardees out of a total of 14 research projects through the MRCG/HRB Joint Funding Scheme.

Four Trinity researchers are among 21 pilot projects across 10 countries awarded funding as Global Brain Health Leaders. Three leading organisations including the Global Brain Health Institute (GBHI) and the University of California San Francisco (UCSF), the Alzheimer's Association and the Alzheimer's Society UK have joined forces to tackle dementia and brain health research projects. The Atlantic Fellows researchers are David Loughrey, Christine Fitzgerald, Catherine Jordan and Geeske Peters.

Trinity was awarded funding of €1.5 million to lead an international research project to build a toolkit to promote interdisciplinary research in December 2018. The SHAPE-ID project ('Shaping Interdisciplinary Practices in Europe'), led by Prof Jane Ohlmeyer and funded by the EU Horizon 2020 programme, will provide guidance and practical recommendations on how best to bring the Arts, Humanities, Social Sciences and Science, Technology, Engineering and Mathematics (STEM) subjects together through interdisciplinary research as one important approach, of many, to address complex questions.

Eleven Trinity projects were among the 38 research projects awarded funding by SFI to support the commercialisation of government-funded research. €4.5 million was granted to support the following researchers in exploring commercial opportunities with their research: Prof Yurii Gun'ko, Dr Stephen Maher, Dr James Phelan, Dr Rocco Lupoi, Dr Sarah Doyle, Prof Ed Lavelle, Prof Jacintha O'Sullivan, Dr Matthew Campbell, Prof Michael Morris, Prof Peter Humphries and Dr Stephen Dooley.

Six Trinity researchers won an IRC Advanced Laureate Award, of up to €1 million each, to pursue frontier basic research. The awardees were Associate Professor of Genetics and Microbiology, Adrian Bracken, Professor in Architectural History, Christine Casey, Professor of Medical Genetics, Seamus Martin, Professor in Pharmacology, Lorraine O'Driscoll, Professor of Condensed Matter Theory, Stefano Sanvito, and Professor of Applied Physics, Igor Shvets.

Ussher Lecturer in Medieval Art in the School of Histories and Humanities, Dr Laura Cleaver, and Assistant Professor in the School of Physics, Dr Aline Vidotto secured ERC Consolidator Grant awards, valued at €2 million each, to pursue frontier research and strengthen their research teams in November 2018.

Professor in Architectural History Christine Casey won the Alice Davis Hitchcock Medallion, the top prize in British architectural history in November 2018.

Professor in Chemistry Silvia Draper won the 2018 Institute of Chemistry of Ireland (ICI) David Brown award for her contribution to inorganic chemistry.

The Registrar's Civic Engagement Award, established to recognise exceptional contributions made by staff to civic engagement, was won by joint winners of the IDS TILDA research team led by Prof Mary McCarron and Prof Michael Shevlin, Director of the Trinity Centre for People with Intellectual Disabilities in June 2019.

HRB Emerging Investigator Awards were presented to Dr Brenda McManus, Dublin Dental University Hospital, Dr Kathy Ruddy, Trinity Institute of Neurosciences, Dr Natalia Munoz-Wolf, School of Medicine, Clinical Medicine, Trinity Centre for Health Sciences, Tallaght University Hospital and Dr Sharee Basdeo, Trinity Translational Medicine Institute, St James's Hospital in June 2019.

Dr Aonghus McNabola, School of Engineering and academics from University of Surrey are pursuing research aimed at reducing the energy consumption in air filtration systems in buildings. The engineers were funded by the Government's Department for Communications, Climate Action and Environment via the Sustainable Energy Authority of Ireland (SEAI), which awarded a total of €8 million to 45 projects that will help homes, businesses and communities deliver a cleaner energy future.

AMBER, the SFI Research Centre for Advanced Materials and Bio-Engineering Research headquartered at Trinity, launched its second phase of the centre which will see 350 new research positions created directly between 2019 and 2025, while also supporting the Government's Future Jobs Ireland initiative. This second phase is being delivered via €40 million in funding over the next six years through SFI's Research Centres Programme, coupled with €77 million in cash and in-kind contributions which AMBER will raise in investment from industry and non-exchequer sources through their collaborative and international research activities.

At the 2018 Trinity Innovation Awards, Professor of Computer Science, Vinny Wade and Director of the ADAPT Centre won the highest accolade, the Provost Innovation Award for his outstanding contribution to innovation throughout his career. He was joined by seven other winners:

- Professor in Mechanical and Manufacturing Engineering Danny Kelly was recognised with the 'One to Watch' award
- The Lifetime Achievement Award went to Prof Sean Corish, Fellow Emeritus in Chemistry
- Professor in Biomechanical Engineering, Bruce Murphy was awarded the Campus Company Founders award
- Professor of Chemical Physics Johnny Coleman and Dr Ramesh Babu Padamati both received an Inventors award
- Professor of Neurology Orla Hardiman and Erasmus Smith Professor of Modern History Jane Ohlmeyer were presented with Societal Impact awards.

Six spin-out companies which attained Campus Company status in 2018, were recognised. These included: CroiValve, Junction Therapeutics, Selio Medical, Danalto, DataChemist, and Volograms.

Project INTEGRITY received funding of €2.4 million via the EU Horizon 2020 Research and Innovation programme. Researchers from Trinity, led by Professor of Ecumenics Linda Hogan, will work with partners from 10 European organisations to develop educational resources, strategies and tools that promote the responsible conduct of research, which is supported by three fundamental principles: transparency, honesty and responsibility.

School of Mathematics researchers leading a Europe-wide network called Project STRONG-2020 secured funding of €10 million from the EU's Horizon 2020 Research and Innovation framework programme. They will use the grant to support and develop experimental and theoretical particle physics research.

Pro-Chancellor Dame Jocelyn Bell Burnell was awarded the Special Breakthrough Prize in Fundamental Physics. The prize recognises the astrophysicist for her discovery of pulsars – a detection first announced in February 1968 – and for her inspiring scientific leadership over the last five decades. Dame Bell Burnell is

donating the \$3 million prize money to fund women, and under-represented ethnic minority and refugee students to become physics researchers.

The ADAPT Centre at Trinity won an award for an advert creation system that has the potential to transform the advertising industry and provide a personalised user-experience for all consumers.

The digital content technology centre, an SFI Research Centre, was named winner of the ‘Outstanding Academic Achievement of the Year’ category at the 26th Annual Technology Ireland Industry Awards.

## 5. Innovation and Commercialisation

Trinity Research & Innovation (TR&I) unit manages and develops the interface between the internal Trinity researcher community and external stakeholders including national and international funding agencies, the VC community and industry. This broad engagement is facilitated through the Research Development Office, the Contracts Office, and the Office of Corporate Partnership and Knowledge Exchange within the unit.

Key highlights in 2018/19 include:

- The Trinity College Dublin-Royal College of Surgeons in Ireland consortium was awarded an ‘A’ rating as part of the TTSI-3 (Technology Transfer Strengthening Initiative III) mid-term review. The TTSI-3 grant supports the Office of Corporate Partnership & Knowledge Exchange to commercialise Trinity research and develop industry engagement. The rating ensures Trinity receives operational funding of circa €2.2m for the final two years of the programme.
- Trinity’s Managed Consultancy Unit is now fully operational and was officially launched in September 2019. CONSULT Trinity liaises with the client on the academic’s behalf so the academic’s freedom to engage in their work is prioritised, and they can choose whether to class a project as consultancy or research. CONSULT Trinity offers to guide this process, and to relieve the academic of any administrative burden in terms of contracts, insurance, and invoicing.
- According to the EC Horizon 2020 dashboard (as of June 2020), over the course of Horizon 2020, Trinity has secured 209 signed Horizon 2020 contracts to the value of €121m (13% of the total income to Ireland) with the gap between Trinity over the next best Irish HEI standing at over €35m. Trinity’s ranking in Europe in terms of Horizon 2020 EU contribution across all organisations is 54th out of almost 33,000 institutions from 158 territories and countries.
- Trinity’s performance in the ERC domain has significantly developed since FP7, a total of 12 (€22m) awards were made under FP7 while at the start of the final year of Horizon 2020, Trinity researchers have secured 33 (€58.5m) ERC Investigator grants to date, creating approximately 175 positions for Postdoctoral Researchers, PhD students and other staff working the grantee’s research teams
- Trinity’s revised IP policy, ‘Policy, Practice and Regulations on Intellectual Property’ was approved by Board. The revisions enable TR&I to progress new venture creation, licensing disbursement enhancements, conflict management and consultancy.
- Trinity received the InBusiness Recognition Award for Academia Collaboration with Industry for its work with “industry stakeholders and agencies, sharing infrastructure, expertise and tackling industry-relevant research challenges.”
- Significant external investments into campus companies (Inflazome (€40m), CroiValve (€3.2m), and DANALTO (€750k)).

### 5.1 Research Funding

During the 2018/19 academic year, over 1,300 research funding applications, with an associated value in excess of €400 million were curated by the Research Development Office.

In the same period, over 1,000 contracts were processed including 881 new research contracts which were awarded to Trinity with a combined total value of €176 million, with Trinity awarded 245 contracts (worth €18 million) to external entities.



## 5.2 Intellectual Property

The Office of Corporate Partnership and Knowledge Exchange received 62 disclosures of novel intellectual property created by Trinity researchers, filed 13 new patent applications, and granted 16 commercial licences. The formation of four new Trinity campus companies was approved – two of which raised €4.1m in seed funding. Sixty-seven collaborative research agreements were concluded with a minimum of €25,000 contributed by industry partners to each collaborative research agreement.

	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19
Invention disclosure forms	48	58	53	60	61	80	62
Patents	16	23	18	17	18	19	13
Licences*	9	30	23	34	13	27	16
Campus and spin-out companies	5	4	3	2	4	5	4

\* Refers to licences, options and assignments

## 5.3 LaunchBox and Blackstone LaunchPad

The hugely successful student incubator programme LaunchBox, Tangent's Student Accelerator, has supported over 80 start-ups that have gone to raise over €69 million in funding and investment since its inception in 2013.

Ten student-led start-up teams were selected for LaunchBox this year – benefitting from coaching, expert advice, seed funding, and access to incubator space and facilities. 2019 was the first year that LaunchBox took place in Tangent, Trinity's Ideas Workspace. Some of the teams – including Bounce Insights, LadyBird Dynamics, and KeepAppy – have moved on to next-stage entrepreneur development programmes and kick-started operations with paying customers.

KeepAppy is a mental wellness platform that allows users to monitor their mental health in a simple and gamified way. KeepAppy placed first in LaunchBox Demo Day 2019. Bounce Insights, which offers businesses the opportunity to reach millennial consumers for market research purposes through their app, is revenue-generating, and just opened their Series A funding round. LadyBird Dynamics, a plug-in device that allows you to see in real-time where your house's energy is being used (and wasted), just completed Phase One of the Climate KIC's accelerator, run by Tangent.

LaunchBox is just one avenue through which Trinity students can nurture their entrepreneurial skills. The Blackstone LaunchPad powered by Techstars campus entrepreneurship programme operates from its new home in state-of-the-art Tangent, Trinity's Ideas Workspace, and fosters student entrepreneurs, connecting them with the start-up ecosystem.

## 6. Human Resources

Human Resources' primary purpose is to partner with the college community to deliver Trinity's Strategic Plan 2014-19. A HR Quality Review was completed in 2019 and the subsequent action plan for implementation of the recommendations has been developed. Human Resources' main pillars of work and achievements during 2018/19 are as follows:

### Talent Management and Development

Approximately 130 learning events, involving nine programmes were delivered in 2018/19, with 1,790 participants.

Talent Programmes and Mentoring activities included a three-day induction for all new academic staff; a Head of School Induction Programme, and the delivery of the Assistant Professor Development programme. This programme included objective setting, performance management reviews, and mentoring, alongside the development programme including master classes.

LinkedIn Learning (Lynda.com) was introduced on a larger scale, more formally, and 20,000 licences were purchased in the latter half of the academic year, to incorporate all students. All professional skills events were expanded to include a blended learning element, which is now a pre-requisite to all the skills programmes. Vitae continues to be offered to all academic and researcher staff, and those related to research (e.g. project managers on research projects) as a significant online resource portal.

In response to a specific need, a new programme was introduced, in partnership with Student Counselling, called 'Responding to Distressed Staff' to assist all people managers, and those working with staff or students who may be in distress, to give them the tools to work through the situation, this was followed up by SafeTalk – a suicide awareness training. Over 100 staff attended at these events.

The Professional Skills Programmes were augmented with a media series, run in conjunction with Public Affairs and Communications, that included social media and your profile (academic), Writing an Op-ed, Pitch to Win, Storytelling for Impact, Media and Broadcasting, Personal Impact, and Influencing and Negotiating.

### Processes and Procedures

Human Resources continued to drive improvement in service delivery across strategic and operational priorities in 2018/19. The annual HR systems upgrade was delivered without interruption to services and maintains a solid platform for payroll, pensions and staff records. Project plans for the roll-out of enhanced online functionality can now be developed for planned implementation on a phased basis.

The Revenue Pay Modernisation Project, a requirement of the Revenue Commissioners, was implemented for both weekly and monthly payroll, effective from 1 January 2019, on time and with no disruption to payments. The Employee Services and Payroll Teams produced in excess of 80,000 payslips and all Public Sector Pay changes were completed on time and in line with the Government directives.

### Employee Engagement

The YourHR series was expanded to include a series on Future Planning, including personal interest events such as Getting Mortgage Ready and Planning for your Financial Future (in partnership with BOI) and the Legal Process of Buying a house, and Wills and Enduring Power of Attorney, these married well with our pension series.

The YourHR Managers Series was continued and expanded, to include managing grievance and disciplinary matters and absenteeism management (delivered by Employee Relations), Courageous Conversations and Induction and Probation (delivered by Learning and Development).

A Dignity & Respect Steering Committee was established in 2019, with the HR Director and the Dean of Research as co-chairs, and employees and students were invited to join in the conversation about how best to nurture a culture of mutual respect, inclusivity and consideration on campus. A series of focus group meetings facilitated by external experts were held to gain an understanding of the challenges faced as a community and to gain a sense of the support structures needed to ensure that people feel empowered to speak out when they experience inappropriate behaviour. A Cultural Conversation Workshop took place in November 2019 as a follow-on to the focus groups held across campus earlier in the year. A key conclusion from these conversations was there is an opportunity for the culture within Trinity to evolve in order to ensure we always treat each other with respect, courtesy and consideration. The insights gained will inform the thinking on how to develop and adopt cultural behaviours to sit in alignment with the 2020-2025 Strategic Plan of Community and Connection.

## 6.1 University Staff

Trinity revised its recruitment policy which was approved and implemented in 2019. The University continues to be an attractive employer in the job market and with a high level of job offer acceptance by the top-ranked candidate. In 2018/19 the Recruitment team advertised 439 posts across a range of University activities: Professor Chairs; Academic positions; Technical; Management and Administrative grade positions; Buildings & Services and Library positions.

During the year, almost 16,000 applications were received for the 439 advertised posts; 394 appointments were made, 84 to academic posts and 310 to professional, administrative and support posts. This is in addition to those staff appointed to research posts where the recruitment is managed directly and to those appointed to some roles in buildings and services area where the recruitment is managed locally.

In addition to the appointments handled by the Recruitment team, the Contracts team issued 1,731 contracts in 2018/19 for appointments taking place outside of Recruitment (Research posts; change of contract terms; contract renewals). This is 51 less contracts than in the previous year.

## 6.2 Professor Appointments

In 2018/19, the Faculty of Arts, Humanities and Social Sciences appointed the Professor of Constitutional Governance (Chair) who commenced in September 2019; the Regius Chair of Greek (1761) and A.G. Leventis Professor of Greek Culture (2017) who commenced in August 2019; and the Professor of Spanish (1926) who will commence in January 2020. In addition, the Faculty of Engineering, Maths and Science appointed the Professor of Statistics (1965) who commenced in September 2019 and the Professor of Geography (1966) who commenced in October 2019.

## 6.3 Senior Administrative Posts

Appointments made to Senior Administrative positions during 2018/19 included: Treasurer/Chief Financial Officer (Interim 2019, appointed January 2020); Head of Visitor Attractions (CRU); Head of Strategic Planning and Process Approval (Human Resources); Head of Academic Service, Innovation and Digital Platforms (IT Services); Business Development and Operations Manager (TBS); FinTech Fusion Senior Executive Manager (ADAPT); Head of Central Events (CRU); Head of Learning & Organisational Development (Human Resources); Associate Director of European Engagement (TR&I); CEO of Tangent; and E3 Business Development Manager (FEMS).

## 7. University Initiatives and Key Events

There were several new initiatives and key events in Trinity during the academic year 2018/19.

Inspiring Generations, the first comprehensive philanthropic campaign in Trinity's history, was launched in May 2019. The largest philanthropic campaign ever launched on the island of Ireland, and the fourth largest of its kind in Europe, Inspiring Generations has two key goals: to raise €400m in philanthropic donations and to inspire 150,000 volunteering hours from alumni and friends of Trinity around the world.

The same month saw an €80 million building for the Trinity Business School being opened by An Taoiseach, Leo Varadkar. The six-storey building includes an Innovation and Entrepreneurial hub, a 600-seat auditorium, smart classrooms with the latest digital technology and an executive education centre. Fronting onto Pearse Street and the University campus, the near zero energy building also provides another link between the city and the University.

Trinity launched its ambitious new Global Relations strategy (GRS 3), which builds on the university's great recent successes in this area, in February 2019. GRS 3 will see a step change in internationalisation. Building on Trinity's global reputation for education and research, GRS 3's headline actions over the next five years are:

- Further diversification and growth in the student body;
- Expanding strategic partnerships with targeted universities around the world to increase, strengthen and leverage the global reach and impact of our research, education and innovation;
- Providing more opportunities for our students to spend time studying in other countries;
- Continuing to integrate students, whether based in Dublin or abroad, into the global Trinity community and enhancing the student experience.

Trinity integrated its innovation and entrepreneurship programmes and initiatives in a new cutting-edge innovation space. Tangent, Trinity's Ideas Workspace, on the first floor of the new Trinity Business School, was officially launched in September 2019. Supported by the university's Innovation Partner, Bank of Ireland, Tangent will invest €6 million in aspiring innovators and entrepreneurs by 2020. The new facility, which is open to students, staff, alumni, entrepreneurs and innovators, has been designed to foster the creation of ideas, with co-working flexible workspaces and event space.

For the fifth year running, Trinity was ranked 1st in Europe for producing entrepreneurs, according to The Universities Report published every September by private equity and venture-focused research firm, Pitchbook. Between 2006 and 2019 Trinity graduates raised US \$4.1 billion in funding across 228 companies. Trinity is the only European university in Pitchbook's Top 50 for producing venture-backed entrepreneurs from its undergraduate programmes.

Trinity was named 28th best university in the world when it comes to the UN's Sustainable Development Goals (SDGs) in the 2019 University Impact Rankings from Times Higher Education. Trinity was ranked 10th out of 471 universities for climate action and 18th for partnerships with other organisations. The University renewed the internationally recognised 'Green Flag' award by An Taisce's Green-Campus programme for the second time. The award followed a detailed submission of data for the past three years, of the college's performance in the areas of environmental management and sustainability initiatives, after which An Taisce once again granted the international award.

Key achievements in 2018/19 in the areas of sustainability, environmental management and enhancement at Trinity include:

- The launch of the first coffee cup deposit-return scheme in Ireland
- Awareness campaigns which engaged all staff and students to participate in decision making for a range of issues, such as where to locate additional water fountains; which sustainable products to stock in the Students' Union shop; and which disposable plastic to be eliminated first on campus
- A 26% improvement in energy efficiency since 2006, and a 45% reduction in water consumption since 2009, despite the number of students and the volume of building space increasing during that time
- The establishment of a Sustainable Procurement Working Group, which is working on creating a Sustainable Procurement Policy and sustainable procurement guidelines for the campus, which will drive environmentally preferable purchasing behaviours
- Trinity researchers showcased pollinator and sustainability friendly gardens at the 2019 Bloom Festival. The Pollinator-Friendly Organic School garden and The E3 garden were created by botanists, educators and engineers collaborating to inspire children and adults with appreciation and respect for nature.

In June, Trinity was announced as one of the higher education institutions that will pioneer a “European University” alliance. Trinity signed an agreement to form part of the CHARM-EU (Challenge-driven, Accessible, Research-based, Mobile European University) alliance, along with partners from the University of Barcelona, Utrecht University, Eötvös Loránd University and University of Montpellier. CHARM-EU will design and test a new European University concept through the creation of a pilot masters delivered across all partners and aligned with the United Nations SDGs. Its mission is to bring together a new generation of creative Europeans enabled to cooperate across languages, borders and disciplines to address societal challenges and skills shortages in Europe.

A milestone for the Healthy Trinity initiative this year was the introduction of a tobacco-free policy which removed tobacco use from the entire campus, with three minor exceptions. The policy was introduced in partnership with the Students' Union and Graduate Students' Union and supported by student-led campaigns, which highlighted the local environmental impact of smoking, by focusing on a clean campus and fresh air, and the global impact, by highlighting the detrimental effects of tobacco production on the planet. Graduates from Trinity are among the most employable and successful in the world according to the QS World University Rankings for Graduate Employability 2019, which rank Trinity first in Ireland for graduate employment rate and alumni outcomes.

A new Trinity Employability Award – Professional Services Pathway, run in partnership with Deloitte, EY, KPMG and PwC, was launched in October 2018. The award provides an opportunity for undergraduate students to improve their career readiness by engaging with leading employers in the professional services sector.

Students from every county in Ireland as well as 20 countries worldwide were awarded special Entrance Exhibition Awards this year. A total of 438 students were presented with the high achievement awards for receiving 500 points or more in the Leaving Certificate (or equivalent final examination). This year saw a far greater diversity of schools and students from every county in Ireland in the revised awards scheme with new requirements making Entrance Exhibitioner Awards more inclusive.

Trinity, Birr Scientific & Heritage Foundation, and Offaly County Council opened the I-LOFAR Education Centre and launched the Astronomical Midlands Schools and Public Engagement Programme in March. Astronomical Midlands (AstroLands), funded by Science Foundation Ireland (SFI), will use the refurbished I-LOFAR Education Centre at Birr Castle to connect with students, teachers and members of the public in rural communities in the Midlands.

Trinity once again opened its doors to the public in September for Probe: Research Uncovered, the free pop-up festival with live experiments, exclusive demonstrations, interactive workshops; showcasing the research and discovery happening here. The campus also welcomed the public for events on Culture Night and Open House Dublin.

The science programme Growing up Live was broadcast live from Trinity's Anatomy Museum as part of Science Week 2018. Supported by SFI and including leading Trinity researchers, the three-part series tracked human life from birth to death and everything in between, with experiments and studies.

The Trinity Long Room Hub (TLRH) regularly engages the public with arts and humanities research and its lectures and discussion series have become annual events. The 5th annual Edmund Burke lecture in October was delivered by Pulitzer Prize-winning poet Paul Muldoon who explored the rights of the artist in society. Among the topics this year for TLRH's on-going 'Behind the Headlines' discussion series were: 'Does Race Matter?', 'Can Stories Save the World?', and 'Crises of Democracy'. The three-year 'Out of the Ashes' public lecture series, exploring collective memory, cultural loss and recovery, was opened by the founding director of the new Library of Alexandria, Dr Ismail Serageldin, who spoke about recapturing the spirit of the ancient Library of Alexandria 1600 years after its destruction. And a new cross-disciplinary lecture series for 2019, 'What does it Mean to be Human in the 21st Century?' was launched in partnership with The Dock, Accenture's global research & incubation hub in Dublin.

Nobel Peace prize winner, His Excellency former President of Colombia, Juan Manuel Santos, spoke about his search for peace and the challenges of ending Colombia's fifty-year civil war at a public event in November organised by the School of Religion, in conjunction with the Department of Foreign Affairs and Trade.

In November, American journalist and author of the bestseller 'Marley & Me' John Grogan gave a public talk and interview, hosted by the School of English and the Oscar Wilde Centre for Irish Writing. While Celeste Kidd, Assistant Professor and Principal Investigator, University of California, Berkeley and one of the leading figures of the global #MeToo movement visited in April as part of the 2019 TCD Neurohumanities Public Talks series to give a talk entitled 'How Sexual Harassment Creates Inequality in Academia'.

Exhibitions Science Gallery Dublin and the Old Library's Long Room provide Trinity with world class spaces for innovative public exhibitions. In 2018/19, Science Gallery's three shows were INTIMACY, OPEN LABS and PERFECTION. In December the artist Siobhan McDonald, winner of a Trinity Creative Challenge award, exhibited 'Future Breath', an evolving work about the importance of the air we breathe and the unmistakable threat that plants and nature face in the wake of climate change. While the Trinity Centre for People with Intellectual Disabilities (TCPID) showed its third annual 'SciFest@TCPID supported by Abbott' exhibition in May - the investigative science and technology projects were researched and curated by current TCPID students.

The Old Library's Long Room hosted several exhibitions in 2018/19. In April, the Bookmarks exhibition, displayed 80 handmade books written and illustrated by Dublin primary schoolchildren over a two-month period with the help of authors, artists and children's book specialists, and was organised by the Trinity Access Programmes (TAP) which supports students from under-represented backgrounds to progress to further education.

The Old Library's Collections were on display for Ireland and the English Lake Poets which ran April-May, showcasing hand-coloured political cartoons, manuscripts, first editions of poetry and prose, and illustrations from rare nineteenth-century travel books exploring Wordsworth's, Coleridge's and Southey's connections to Ireland. The Old Library's extensive 18th and 19th century collection of political cartoons gifted by writer and cartoonist Nicholas Robinson, was the centrepiece of 'Drawing your attention: Four Centuries of Political Caricature' in June with contemporary works lent by freelance and Irish Times' artist, Martyn Turner. Over 1,600 entries were received from across Ireland and from the US, UK, Europe and Australia for the second annual Book of Kells Creative Competition. Entrants of all ages were invited to interpret themes from the Book of Kells in art and writing. Twelve prizes were awarded in six categories.

Trinity celebrated its one millionth visitor to the Book of Kells and Old Library Exhibition for 2018 in November. This was the first time that one million visitors have visited the Book of Kells Exhibition in a given year.

Co-discoverer of the DNA double helix, James Watson, together with seven Nobel Prize winners were among the guests and speakers at the symposium, Schrodinger at 75, held in Trinity and in the National Concert Hall in September, marking the 75th anniversary since Erwin Schrodinger gave his seminal What is Life? lectures in Trinity College in 1943.

## 8. Capital Development Programme

### 8.1 Projects

#### Printing House Square – Student Accommodation

Building works are well underway for Trinity's new 250-bedroom student accommodation building on Pearse Street, which is delayed due to difficulties in the construction marketplace but due for completion in summer of 2020 will also have student services space, a new Health Unit and Sports Facilities.

At the end of summer 2019, the consultation processes started under the new Strategic Housing Developments planning system for permission to build 360 bedspaces in Trinity Hall, Dartry, and the outcome is looked forward to for this innovate project which will reduce Student rents per week by 20% of the normal market rates.

#### Trinity Business School project

This €80m project was delivered on time and on budget, providing a new and expanded Business School together with an Innovation & Entrepreneurship Hub on Pearse Street incorporating the site of the Luce Hall (former Sports Centre). A new entrance is also created from Pearse Street, along with a bright new 200-seat restaurant 'The Forum'. The project, spanning 14,000 sq.m, includes a 600-seat auditorium, 24 student bedrooms, public spaces where students can meet and exchange ideas, 'smart' classrooms with the latest digital technology, and the new Trinity Boardroom.

#### The Martin Naughton E3 Learning Foundry

Trinity appointed internationally renowned architects Feildon Clegg Bradley to this project, and during the summer of 2019 the process of applying for planning permission to Dublin City Council was underway for this new Engineering, Environment and Emerging Technologies building. The project will take a few years to complete, including refurbishment of vacated spaces in several areas around campus.

#### Environmental, Electrical Infrastructure, Space Utilisation and other projects

A €9m project to increase the maximum electrical import capacity for the University, and to combine multiple existing supplies into one, was completed on budget and on schedule and is fully operational, with the final connection to Printing House Square due at the end of 2020. Important maintenance projects and energy management initiatives continue around the campus, and more are planned (subject to funding), to ensure the College can provide a safe and healthy environment and to improve and maintain a high level of standards in our built environment.

A range of space utilisation initiatives are being planned, to leverage the best use of our estate. A refresh of public spaces is underway in the Arts Building, with a second phase in proceeding now on time and on budget. This will see modern and functional 'learning commons' style furnishings and finishes in areas for students to collaborate. Trinity is committed to providing the best student accommodation possible and continues to work through a programme of refurbishments in campus accommodation, including a significant project to refurbish the 320-year old Rubrics, and the Chief Stewards House.

Plans for the redevelopment of the Old Library continued with Heneghan Peng Architects, including the design for the new exhibition and early works to the Treasury. Planning for the pre-development phase of the Trinity Technology Enterprise Campus also continued to make progress during the 2018/2019 academic year.

## 8.2 Energy Conservation

In 2018/19 Trinity's buildings consumed 35.5 million kWh of electricity (a 3% reduction from 2017/18) and just over 44 million kWh of natural gas (a 7% reduction from 2017/18).

Electricity consumption on the main city centre campus recorded a reduction of just over 4% which was a very positive outcome, particularly as a large new building, Trinity Business School, was added to the campus during the year. The year was a much milder year in comparison to 2017/18 when we had an extended cold snap with heavy snow in March 2018. This milder year, energy conservation and energy awareness assisting in reducing the annual gas consumption.

Throughout the year several projects were completed to improve energy efficiency, including:

- a. On the main campus two large central water chillers were replaced in the Lloyd Building and in Sports/CRANN. They were replaced with more energy efficient chillers, associated controls and high efficiency pumps. Initial indications are that these two replacement projects have yielded electricity reductions of over 400,000 kWh in the year reported. It is expected the reductions will be greater for a full year; and
- b. As part of improvement works the oil boiler in the recently acquired Iveagh Sports Grounds was replaced with a high efficiency condensing gas boiler. Several areas with long hours of artificial lighting were re-fitted with high efficiency LED lighting.

As noted above the new Trinity Business School (TBS) was completed and officially opened in May 2019. TBS is the first Trinity building to meet the requirements of the Near Zero Energy Buildings (NZEB) standard. The building is predominately naturally ventilated, has a full LED lighting installation with full lighting control system. The building has two large green living walls, a green roof, roof terrace and a rainwater harvesting system. The building also has a roof mounted photo voltaic (PV) panel with a capacity of 45 kW peak. This first PV array for the University is generating onsite renewable electricity that is used on site to partially power TBS.

The TBS project also included the extensive refurbishment of Pearse Street Houses 186-188. This returned the houses to University residential use. The houses have had the insulation upgraded, windows repaired and draught proofed, a complete new heating installation and LED lighting throughout.

During the year works progressed on the Printing House Square project that will complete in 2020. This building will provide student accommodation for 249 bed spaces, University Health Centre, Disability Services, sports facilities and space for Facilities and Services. This development will also meet the requirements of NZEB standard but also constructed to be a BREEAM Excellent standard. The BREEAM standard covers a wide variety of key sustainability criteria. The new development when complete will be a very visible commitment of the University to be an environmentally sustainable campus. This building will be highly insulated, have full LED lighting, a roof mounted PV array, a new 100 kW combined heat and power (CHP) plant plus several measures to minimise and reduce water consumption.

During the year the development of the E3 Learning Foundry progressed. This building will be a dedicated teaching space for Engineering, Computer Science and Natural Sciences. This building is being designed to be NZEB and BREEAM Excellent. It will be a highly sustainable building with on-site renewable energy and extensive heat recovery. It will be the first Trinity large scale building not requiring any fossil fuel for thermal heating or generating domestic hot water. It will be a working laboratory allowing renewable energy sources and engineering structures to be demonstrated as part of the respective schools teaching and research projects. Following a similar high sustainability agenda, the design development commenced on the replacement of Cunningham House on the Trinity Hall campus. The new building will be designed to have no on site fossil fuel and extensive onsite renewable energy generation from both Air Source Heat Pumps and roof mounted PV arrays.



The Provost's Advisory Committee on Sustainability and Low Carbon Living met throughout the year to create a strategic direction for improving the sustainability and energy efficiency of the University. The committee has guided the preparation of the annual sustainability report. Trinity became a member of the Irish Universities Association (IUA) Sustainability Working Group. This group is looking to share experiences, best practice and opportunities to improve sustainability throughout the 3rd level sector.

Ongoing energy awareness campaigns were coordinated with the University Green campus Committee and complimentary campaigns run in conjunction with the Office of Public Works (OPW). The campaigns are well supported by the student population. The Staff Sustainability Network also creates a platform for sharing energy and broader sustainability initiatives with a wide variety of staff.

The University's 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 2020 measured against a base year 2006-2008. The most recent report confirms the energy intensity (efficiency) as measured by the Energy Performance Index (EnPI) has reduced (improved) by 31.9% since the benchmark year.

During the year gone the Government launched the Climate Action Plan 2019 (CAP19). This plan sets out several more ambitious targets for improvements in energy efficiency, reduction in on site fossil fuel combustion and improvement in existing Building Energy Ratings (BER). Our progress to date on energy efficiency provides a good platform on which to build towards these new targets over the next decade.

The gross expenditure for the year 2018/19 for utility cost amounted to €7.08 million (€7.47 million for 2017/18). The financial year saw the increases in unit gas prices after some historical lows. This increase was offset by reduced annual consumption. Electricity costs benefited from the reduction in both consumption and a small reduction in unit prices. The energy contracts were managed and monitored by the Estates & Facilities Department with the support of Trinity's Procurement Office and the Office of Government procurement (OGP) to lever the collective purchasing power of the 3rd level sector.

## 9. Philanthropy

The academic year 2018/19 culminated in two philanthropic milestones: 2 May 2019 saw the public launch of Inspiring Generations, Trinity's first ever comprehensive, university-wide philanthropic campaign, and the largest such campaign ever launched on the island of Ireland. Inspiring Generations set has ambitious targets: to raise €400 million in donations and 150,000 hours in volunteering. The priority projects of the campaign include the redevelopment of the Old Library; Engineering, Environment & Emerging Technologies (E3); the Trinity St James's Cancer Institute; and New Generations, creating a diverse campus that reflects Irish society and attracts brilliant talent from around the world.

Three weeks later, on 23 May, came the formal opening of the new Trinity Business School. Designed by Scott Tallon Walker, the iconic six-storey building also houses Tangent, Trinity's Ideas Workspace, and the A & K Dargan theatre, now the largest auditorium on campus. This flagship, near zero energy, building was made possible by donations from alumni and friends who raised a quarter of the funding, while the Bank of Ireland is supporting Tangent.

Other philanthropic highlights of the year include the unveiling, in May, of the portrait of former chancellor, Mary Robinson – the first new portrait on the Dining Hall walls in over 150 years and the first ever portrait of a woman to hang there. Painted by Mark Shields, whose work is held in the National Gallery of Ireland and the Ulster Museum, the portrait was enabled by the generosity of fifty alumni, with donations coordinated by the Trinity Association & Trust.

In April came the inaugural John Pollard Foundation International Poetry Prize, which was awarded to Hannah Sullivan for her debut collection, *Three Poems* (Faber & Faber). The prize is administered by the Trinity Oscar Wilde Centre in the School of English. It is funded by Stephen Vernon, chairman of Green Company plc, and named in honour of his grandfather, John Pollard.

In January, six students with intellectual disabilities became the first ever graduates to be awarded a Level 5 Certificate in Arts, Science and Inclusive Applied Practice from the Trinity Centre for People with Intellectual Disabilities (TCPID). Over 30 TCPID business partners, from law firms to the aircraft leasing sector, provided financial and practical support to make this new certificate possible.

A new prize and a scholarship were established in memory of two Trinity medical graduates: the Dr Eithne Walls Memorial Scholarship was established by Dr Ethna McGourty, M.B. (1980), and her husband, Timothy Haley, in memory of her niece, Dr Eithne Walls (M.B. 2007) whose life was cut short in the Air France disaster on 1 June 2009. The scholarship is held between Trinity and the Royal Victoria Eye and Ear Hospital, where Dr Walls was senior house officer in ophthalmology.

## **10. Financial Statements for the Year-ended 30 September 2019**

Please access link below:

[https://www.tcd.ie/financial-services/external-assets/pdfs/Consol\\_Financial\\_Statements\\_1819.pdf](https://www.tcd.ie/financial-services/external-assets/pdfs/Consol_Financial_Statements_1819.pdf)

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## Appendix I

### Attendance at Board meetings 2018/19

There were 12 meetings of the Board (Governing Authority) in 2018/19, attendance noted below.

#### Ex-officio members:

Provost (Dr Patrick Prendergast) (12), Vice-Provost/Chief Academic Officer (Prof Chris Morash) (12), Senior Lecturer/Dean of Undergraduate Studies (Prof Kevin Mitchell) (11), Registrar (Prof Paula Murphy) (12), Bursar/Director of Strategic Innovation (Prof Veronica Campbell) (11).

#### Elected members:

Prof Deirdre Ahern (12), Prof Sarah Alyn Stacey (11), Prof Louis Brennan (11), Prof Andrew Burke (12), Prof Sylvia Draper (8), Ms Stephanie Farrell (9), Dr Darren Fayne (10), Mr David Grouse (11), Mr James Keogh (10), Prof Kathleen McTiernan (11), Prof Rachel Moss (10), Prof Brian O'Connell (4<sup>1</sup>), Prof Eunan O'Halpin (11), Prof Diarmuid R Phelan (10), Prof Aidan Seery (10), Prof Fintan Sheerin<sup>2</sup> (9), Prof Richard Timoney<sup>3</sup> (2).

#### External members:

Ms Jill Donoghue (12)

#### Student members:

Ms Aimee Connolly (10), Mr Oisín V Coulter (11), Mr James Cunningham (10), Mr Shane De Rís (11)

## Appendix II

### Board Expenses 2018/19

No fees are paid to members of the Board (Governing Authority). The external Board members are entitled to Senior Common Room membership fees of €279. No other expenses were claimed by Board members for in the academic year 2018/19.

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<sup>1</sup> Eligible to attend 7 meetings.

<sup>2</sup> Eligible to attend 11 meetings.

<sup>3</sup> Professor Richard Timoney died on 02/01/19.



**Trinity College Dublin**

Coláiste na Tríonóide, Baile Átha Cliath

The University of Dublin

# Annual Report **2018-19**

[www.tcd.ie](http://www.tcd.ie)