Trinity College Dublin Coláiste na Tríonóide, Baile Átha Cliath The University of Dublin

Annual Report 2020-21

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Members of the Board of Trinity College Dublin during the 2020-2021 academic year were:

Ex Officio	
Patrick J. Prendergast	Provost
Jürgen Barkhoff	Vice-Provost/Chief Academic Officer
Kevin Mitchell	Senior Lecturer/Dean of Undergraduate Studies
Brendan Tangney	Registrar
Veronica A. Campbell	Bursar/Director of Strategic Innovation
Elected/Nominated	
Sarah Alyn Stacey	Fellows and Fellow Professors (2020-2024)
Khurshid Ahmad	Fellows and Fellow Professors (2020-2024)
Andrew Burke	Fellows and Fellow Professors (2018-2022)
Louis Brennan	Fellows and Fellow Professors (2018-2022)
Kevin Byrne	Technical, Administrative and Support Staff (2020-2024)
Jill Donoghue	External Member (nominated by the Institute of International
Sitt Donoghue	and European Affairs, IIEA) (2018-2022)
Daniel Faas	Fellows and Fellow Professors (2019-2022)
David Grouse	Technical, Administrative and Support Staff (2018-2022)
Eoin Hand	Student Representative (President of the Students' Union) (2020-2021)
Rose Anne Kenny	Fellows and Fellow Professors (2020-2024)
Leah Keogh	Student Representative (Welfare Officer of the Student's Union) (2020-2021)
Caitriona Leahy	Fellows and Fellow Professors (sub for Professor Alyn Stacy)
Rachel Matthews-McKay	Library Assistants, Senior Executive, Executive and Secretarial staff (2020-2024)
(Owen) Ross McManus	Fellows and Fellow Professors (2020-2024)
Kathleen McTiernan	Non-Fellow Academic Staff (2018-2022)
Andrea Nolan	External Member (nominated by the Minister for Education in consultation
Andrea Notan	with the Provost) (2020-2024)
Megan O'Connor	Student Representative (Education Officer of the Students' Union) (2020-2021)
Diarmuid R. Phelan	Fellows and Fellow Professors (2018-2022)
Lorna Roe	Non-Fellow Academic Staff (2020-2024)
Gisele Scanlon	Student Representative (President of Graduate Students' Union) (2020-2021)
Aidan Seery	Non-Fellow Academic Staff (2018-2022)
Fintan Sheerin	Non-Fellow Academic Staff (2020-2024)
John Walsh	Non-Fellow Academic Staff (2020-2024)
In attendance	
Ian Mathews	Treasurer/Chief Financial Officer (in attendance ex officio)
John Coman	Secretary to the College (in attendance <i>ex officio</i>)
Orla Cunningham	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)

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: trinity.communications@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 101st place in the world and 35th in Europe in the QS World University Rankings 2021 and in 155th position in the Times Higher Education World University Rankings 2021.

1.2 Quality

The 2020-21 academic year saw preparations continue for Trinity's Institutional Quality Review, scheduled for 7-11 March 2022, and a number of key deliverables for the review were completed during the year. These include:

- Submission of the Annual Quality Report (AQR) 2020-21 to QQI in December 2021;
- A college-wide survey 'We value your Opinion on Quality in Trinity' conducted in November 2020;
- Publication of Case Studies in Quality, showcasing quality enhancement initiatives across the College community;
- Focus groups with students in June and July 2021 to inform the development of the Institutional Self-Evaluation Report (ISER).

Covid-19 continued to impact the quality review cycle in 2020-21. The Quality Committee approved procedures for virtual reviews in November 2020, to respond to the pandemic. These procedures were used for the first time in March 2021 in the virtual review of Academic Practice. All other reviews due to be conducted in 2020-21 were deferred due to the ongoing global pandemic. The Quality Committee considered a Report on the Emergency Response to Covid-19 and Preparations for Teaching, Learning and Assessment for 2020-21 in October 2020. Revised terms of reference for and membership of the Quality Committee, were approved in October 2020 and included the provision for an External Quality representative for the first time.

Trinity's Quality Policy Statement was updated in March 2021 to clarify the circumstances under which a professional body/industry accreditation can be used to substitute/satisfy the University's quality review procedures for Schools and Units with a particular focus on the role of the Faculty Dean in approving any decision to explore this as an alternative option to a Trinity internal quality review process. Trinity approved the QQI Accreditation Principles in June 2021. The Principles were the culmination of a two- year project undertaken by QQI with representatives of Professional Statutory Accreditation Bodies and Higher Education Institutions (HEIs) to addressed shared areas of interest in the quality of academic programmes preparing students for professional registration and practice in professional fields.

In December 2020, a key milestone was reached in the CHARM-EU European University Alliance when the first programme to be delivered by the CHARM-EU Alliance 'Masters in Global Challenges for Sustainability', was externally reviewed by a panel of experts using the European Approach to Quality Assurance of Joint Programmes. The Quality Office was involved in the design of quality assurance policies and procedures to meet the requirements of this process with quality representatives from each of the Alliance partners. The Masters in Global Challenges for Sustainability was approved by Academic Council in January 2021 for commencement in September 2021.

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 18,871 registered undergraduate and postgraduate students in 2020-21. Of these, approximately 76% were from the island of Ireland. In looking at the EU vs non-EU cohorts, 15,636 (83%) were EU, and 3,235 were non-EU (17%). The student population was 60% female and 40% male.

Seventy-one percent were registered on undergraduate programmes, 29% on postgraduate programmes, and 0.5% on foundation courses.

2.2 Admissions Statistics

In 2020, Trinity received 8,326 first preference CAO applications – an increase of 9% on 2019 (7,611), resulting in Trinity attracting 17% of all first preference applications across the university sector (16% in 2019).

A total of 71,648 applicants applied through the CAO for Level 8 courses in Irish higher education institutions, an increase of 6% on the 2019 figure of 67,281. In 2020, 19,586 (17,880 in 2019 and 17,698 in 2018) mentioned Trinity as one or more of their CAO course preferences.

In 2020, 527 new entrants were awarded Entrance Exhibitions (452 in 2019). The students came from 455 different schools (403 in 2019) from all 32 counties in Ireland (31 in 2019), together with candidates from 17 schools in the following 13 countries: Belgium, Croatia, England, France, Germany, Hungary, Italy, Luxembourg, Norway, Poland, Spain, Sweden and Switzerland.

Out of the overall awardees, 199 students are studying Engineering, Mathematics and Science; 128 students are studying Health Sciences, 158 students are studying Arts, Humanities and Social Sciences and a further 42 were multi-faculty. Overall, 60% of the 527 awardees are female and 40% are male.

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 2020, a total of 182 students applied to participate in the Study (232 in 2019)

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 2020-21 academic year, 73 students were awarded Scholarships on Trinity Monday 2021. Recipients of the scholarships represented all faculties: the Faculty of Arts, Humanities and Social Sciences (31); Faculty of Science, Technology, Engineering, Mathematics and Science (12); Faculty of Health Sciences (26); and multi-faculty (4).

2.4 The Curriculum – New Courses

The following undergraduate and postgraduate courses and modules were approved by the University Council in 2020-21:

UG/PG	Name of Course	Degree award
UG	Dual degree programme in Mathematics with Columbia University	BA (mod)
PG	Entrepreneurship of Smart Medicines	MSc
PG	Business Administration- Flexible Executive Strand	МА
PG	Immune Therapies	Postgrad cert and postgrad dip
PG	Diversity and Inclusion in Further Education and Training	Postgrad cert and postgrad dip
PG	Pharmaceutical Manufacturing Technology (online)	MS
PG	Electronic Information Engineering and new Strand in Computational Engineering	Postgrad cert and postgrad dip new entry and exit routes
PG	Mechanical Engineering and new strand in Zero-Carbon Technology	Postgrad cert and postgrad dip new entry and exit routes
PG	Middle East in a Global Context (online)	MPhil, Postgrad dip, Postgrad cert
PG	Quantum Science and Technology	MSc
PG	Engineering for Climate Action	Postgrad dip
PG	Circular Economy and Recycling Technologies	Postgrad dip
PG	Sustainable Development for Business	Postgrad cert
PG	Statistics (online)	Postgrad cert
PG	Theatre and Performance	MPhil with an exit Postgrad dip
PG	Applied Social Data Science	Postgrad dip
PG	Global Challenges for Sustainability	MSc
PG	Advanced Ageing and Frailty Studies	Postgrad dip
PG	Comparative Literature	MPhil
PG	Identities and Cultures of Europe	MPhil
PG	Literary Translation	MPhil
PG	Smart and Sustainable Cities	MSc
PG	Climate Entrepreneurship	Postgrad cert
PG	Healthcare Innovation (Tangent)	Postgrad cert
PG	Entrepreneurship Biotech and Pharma	Postgrad dip

2.5 Commencements, Firsts and Gold Medal Awards

A total of 3,003 degrees were conferred (1,400 primary degrees and 1,603 higher degrees) in 37 commencement ceremonies in the 2021 calendar year. One-thousand and twenty-eight students received first class honours at the degree examinations in 2020-21 and, of these, 204 were awarded Gold Medals.

Due to COVID-19 there were no Winter honorary degree commencements in 2020. On Thursday 29 April 2021, honorary degrees were conferred on William Duncan and Martha Dow Fehsenfeld at a Special Commencements Ceremony conducted by Zoom. Prior to a distinguished and highly influential international career, William Duncan was Trinity Professor of Law and Jurisprudence, pioneering the development of Family Law in Ireland. Martha Dow Fehsenfeld was the Founding Editor of the four volumes of 'The Letters of Samuel Beckett' – a task for which she was personally chosen by Beckett himself and which was successfully completed on the publication of Vol 4 in 2016.

2.6 Trinity Access

For nearly three decades, Trinity Access has worked with, and for, thousands of students from traditionally under-represented backgrounds, supporting, motivating, and encouraging them to fulfil their individual potential.

Trinity Access takes a lifecycle approach, engaging with students from primary school through to college graduation, and reaching out to lifelong learners to support their pathways to and through education. To date, over 3,000 undergraduate students have entered Trinity through our entry routes and have been supported by us at every stage of their educational journey. More than 10,000 primary and secondary students engage in our outreach programmes annually, all of which aim to widen participation in third level education from under-represented groups.

The programmes encompass second-level pedagogy, alternative admissions systems to higher education, post-entry support and career development programmes for undergraduates. Coupled with this, there is a strong focus on teacher professional development and embedding sustainable school-based programmes for deeper school cultural impact and community engagement.

Trinity Access (including the Mature Students Office) 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 the Professions Programmes (including Law, Business and STEM)
- Post Entry Progression Programme
- Research, Evaluation and Development
- Trinity Access 21 Project
- Bridge to College Programme
- College Awareness Week (CAW)
- Community Mentoring
- Give Tech to Schools

There were 481 admissions to Trinity through Trinity Access in 2020-21, via alternative entry routes and preparatory programmes and the Mature Student Office.

Trinity Access works with DEIS schools with a legacy of low progression to third level. It works with 70 schools across the wider Dublin area, 40 are closely linked primary and second-level schools and another 30 schools

are involved through the Schools of Distinction programme, or through partnerships with organisations like Citywise Education. Trinity Access, with the assistance of 20 plus Trinity departments, enabled approximately 10,000 students, parents and teachers to participate in activities during 2020-21, mostly in virtual settings due to Covid-19 restrictions. These included virtual campus tours, online mentoring programmes, online workshops including CodePlus coding classes for girls, the Pathways to Law, Business and Technology programmes, as well as an engaging online summer school. There were over 1,100 direct teacher engagements through online "teachmeets", post graduate courses and the 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.

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 2020-21 there were 172 mature new entrants, with over 700 mature students registered across all faculties in Trinity. This figure includes students who have progressed from the Foundation Course for Mature Students and mature students from link ETB Colleges (Pearse/Plunket).

Trinity and Trinity Access have a long-standing commitment to the community and Trinity Access has collaborated with three City of Dublin Education and Training Boards (CDETB) on University Access Courses since 2004. The University Access Courses in Pearse, Plunket and Liberties College, cater for up to 75 students. The Partnership provides students with a hybrid FET-HE experience and pathway to Higher Education by supporting their exploration of third level degrees through targeted activities in TCD. These activities including introductory lectures, access to the library and education guidance. Since the partnership began, 333 students have progressed to Trinity. In 2020-21 partnership students benefited from the Trinity Access Tech2students campaign, receiving laptops to enable them to participate in online learning as well as a suite of tailored online activities hosted by Trinity Access including subject lectures, seminars and workshops designed to support their skills development for degree level studies.

Enhancing partnerships between Further Education (FE) and Higher Education (HE) is a key objective of the University and the National Access Plan. Trinity has committed to increasing numbers of applicants to the University from level 5 and 6 Quality and Qualifications Ireland -Further Education and Training (QQI-FET) Awards. This has resulted in the expansion of existing QQI-FET routes and the establishment of new progression pathways across all Faculties in the university. A FET project officer joined the Trinity Access team in August 2021 to continue the mission of diversifying admission routes to the college by developing a targeted recruitment strategy, orientation and supports for FET students.

Since its establishment in 2014, the College Awareness Week campaign (CAW) has become a central fixture in the educational calendar. For one week in November each year, schools, universities, colleges of further education, libraries and more, host unique events to promote a college-going culture within their communities. Although the number of students in Ireland progressing to further and higher education has seen an increase in recent years, there are communities who send less than 10% of their students to college (HEA, 2015). CAW aims to bridge this gap by providing inspiration and information to all students about the importance of having a post-secondary education plan. We advocate for students to have the choice to pursue the course best suited to their interests, abilities, and future plans, whether that is a post-leaving certificate qualification, an apprenticeship or a university degree.

2020 saw a hybrid CAW campaign with three cornerstones: College Connections, Career Connections and #CAWConnections. Over 130,00 participants got involved in CAW 2020, hosting and logging events in over 296 educational institutions in 27 counties in Ireland, a 63% increase from 2019. In addition, a total of 47% of DEIS secondary schools in Ireland participated in CAW 2020.

For all of us, 2020 was a year unlike any other - for the students that we support, this meant that their needs were greater than ever before. In April 2020, Trinity Access, in partnership with Kinia (formerly Camara Ireland) and the ESB launched the Tech2Students campaign to help bridge the digital divide for young people in need.

The rapid move by schools from face-to-face to online teaching left many on the wrong side of that digital divide, exacerbating what was already a disadvantage for students from marginalised communities.

The Tech2Students campaign asked the public and businesses to get involved by donating laptops or making cash gifts to facilitate the purchase of refurbished devices which were then distributed to those in need. From the moment the initial call went out, the response was overwhelming as organisations and individuals rallied to support. Thanks to that remarkable generosity, Tech2Students was able to reach thousands of students across Ireland.

The Tech2Students refurbishment hub in Dublin has now closed, but our work is not done. Covid-19 showed that the digital divide is real and remains a huge problem for second level students with between 50-70% of students in DEIS schools experiencing a lack of access to broadband

or a suitable learning device. The Trinity Access Give Tech to Schools project continues to address this need in our second-level schools.

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 2021 award recipients were Professor Stephen Barrett, School of Computer Science & Statistics, Professor Annemarie Bennett, School of Medicine, Professor Eric Downer, School of Medicine, Professor Órla Gilheaney, School of Linguistic, Speech & Communication Sciences, Professor Justin King, School of Engineering and Professor Cormac McGuinness, School of Physics.

Seven staff members who were nominated for the Provost's Trinity Excellence in Teaching Awards were shortlisted: Professor Peter Harrison, School of Dental Science, Professor Ronan Lyons, School of Social Sciences & Philosophy, Professor Graeme Murdock, School of Histories & Humanities, Professor Cian O'Callaghan, School of Natural Sciences, Professor Daniela Tropea, School of Medicine, Professor Paul Claffey, School of Medicine, and Professor Joseph Roche, School of Education.

These awards recognise the commitment and dedication to teaching and learning, innovation in creating learning environments which both support and challenge individual students, and the contribution to College's high reputation for its teaching quality. 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 2020-21. From anywhere around the world, students could access a range of Trinity-developed course materials.

Developed as part of the University's strategic goals for online education, fully online postgraduate courses have been available since 2014. Many existing courses were updated in 2020-21 to keep learning content current and in line with best practice.

In 2020-21 Trinity ran an online diploma in Radiation Therapy, and an online diploma in Clinical Exercise to be delivered alongside the School of Medicine's online certificate modules. A new fully online CPD in Domestic Violence, developed through the School of Social Work and Social Policy also started running this year. A blended module in Careers and Employability for PhD students was developed by the Careers Advisory Service, and a new fully online module in Research Integrity and Ethics in an Open Scholarship Era was also developed for Trinity's PhD students.

In support of Trinity Education Project's (TEP) goal to renew Trinity's undergraduate education, Trinity Online Services continued to support multiple TEP elective modules through the production of digital learning tasks, video, and interactive multimedia resources for multiple Schools across the University.

Trinity continues to support global-learning communities through the provision of high-quality, open-access courses (MOOCs) in partnership with FutureLearn. In 2020-21, over 20,000 learners signed up for Trinity MOOCs. Popular topics included The Book of Kells, Journey to Birth, Exercise Prescription and The History of the Book.

2.9 International Agreements

In the 2020-21 academic year there were multiple partnerships in development even though Global mobility was severely impacted by the COVID-19 pandemic during this time. New student exchange agreements signed during this academic year include college-wide programmes from Mahidol University (Thailand); Pharos University (Egypt); and University of Technology Sydney (Australia). Other agreements were under negotiation during the 2020-21 academic year with several other universities from across the globe including institutions in Egypt, Hong Kong, South Africa, United Arab Emirates, Canada, Chile, Jordan, United States and New Zealand.

Trinity remains part of CHARM-EU (Challenge driven, Accessible, Research based, Mobile European University), whose theme is Reconciling Humanity with the Planet. Our partners are the University of Barcelona, Utrecht University, Eötvös Loránd University Budapest, and University of Montpellier.

The Global Mobility Bursary Programme was introduced in the most recent Global Relations Strategy (GRS3) as a further support for students undertaking a global mobility. In 2020-21 due to the relatively low number of students undertaking an international experience, the Global Relations Office was in a position to financially support all students going on an international exchange via the Global Mobility Bursary programme. This helped students to offset costs such as the higher than usual cost of travel insurance. However, in future years this will be a competitive process whereby a selection Committee will consider applications and decide which student applicants are granted a Global Mobility Bursary year on year.

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, Transition to Trinity 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 2020-21 academic year, students and student societies were successful in many areas. Notable achievements and anniversaries this year include:

Ten teams of student entrepreneurs at Trinity pitched their company plans at the first ever online LaunchBox Demo Day in September 2020. They sought backing from angel investors and early stage venture capitalists to take their startups – which are developing innovations across a variety of sectors – to the next stage. While digital health, music and legal tech featured, sustainability was a dominant theme, as the young entrepreneurs presented businesses focused on eco-friendly packaging, recycling and sustainable travel.

A documentary film by Trinity students, 'Is There Anybody Out There? Young Voices From Inside a Pandemic, was screened for the first time at the Virgin Media Dublin International Film Festival in March 2021.

Trinity student Matthew Thomas, who graduated in June 2021 with a B.A. in Molecular Medicine, received the Mary Mulvihill judges' €500 highly commended award for an essay entitled 'Compromised: Lessons learned from the AIDS epidemic'. The theme of the 2021 Mary Mulvihill Award was 'Virus'.

A team of students with a novel idea for a sustainability-minded social enterprise emerged victorious in the 2020 Provost Innovation Challenge. The team – ReFunk – built a platform that allows users to list unwanted belongings and materials, which another user can then collect and upcycle. The upcycler will sell the product on the platform and then provide the original donator with a percentage of the profit.

In February 2021, Trinity Business School graduates Paddy Ryder and Rob Muldowney began connecting students struggling to find internships with small businesses impacted by the coronavirus pandemic through their new platform, Covid Interns.

FloWaste, a sustainability-minded food analytics startup led by former students from Trinity, received \$270,000 in investments to take their company to the next step. The company uses proprietary image recognition technology to empower cafeterias, fast-food and quick-service restaurants to reduce food waste.

Societies

The Central Societies Committee (CSC) was extremely fortunate to have an outstanding group of students who, during the COVID-19 pandemic, continued to work to find ways for societies to operate online, in a hybrid way, and some getting back to being in person. An online 'Societies Hub,' along with Zoom accounts encouraged societies to be as innovate as possible in terms of how they continued to run remotely, and they thrived. By 2021, 11,000 students joined societies through our Societies Hub.

The society committees and students came up with some very innovative and exciting events, and the CSC determined to celebrate these in as best a way as possible. Alumnus, David O'Doherty hosted the Society of the Year Awards online, which he did in spectacular fashion.

These are just a few highlights from the many events organised by Trinity Societies which demonstrate students' resilience and creativity during COVID-19 restrictions:

Trinity Musical Theatre Society

Into the Woods – a Virtual Production: The cast took to their gardens or found a woodland within their 5km boundary and filmed themselves performing outdoors before sending off the footage to be approved and edited. The result was a stunning theatre piece that highlighted the ability of TMT members to adapt to new challenges and be innovative and resilient in the face of adversity.

History Society

Trinity's Hidden History: This was a virtual tour of the college campus. Over the course of two weeks, the committee researched areas of the Trinity campus that had an interesting history that was not well known by the larger student population of the campus. The structure envisioned for this event was a tour of these sites on campus, where members of committee would act as tour guides while others would play a character relating to each building – all of this portrayed via Zoom to members.

Gamers

Convergence: Convergence was an eight-week multi table Dungeons and Dragons (D&D) campaign for DU Gamers members taking place in the autumn of 2020. This event showed DU Gamers at its best, giving an engaging and fun role-playing game (RPG) experience for both established members and acting as an introduction to collaborative storytelling and DU Gamers for those new to the hobby.

Korean, Japanese, Chinese, Arabesque, South East Asian: Asian Week

The group gathered each society to share their respective cultures online, with films during the Cultural Film Fair Night, Asian Arts competition, Daily Asian Recipes, Cultural Gaming Night, and lastly a week-long movement to spread awareness of the rise in racism against Asians.

Photographic: Virtual Exhibitions

DUPA held three 3D online exhibitions this year, titled 'Home', 'Arrivals & Departures' and 'Bare'. They published the exhibitions on Kunstmatrix Art Space, allowing them to showcase the pictures in a virtual threedimensional gallery space. The virtual exhibitions achieved the society's main goals - to offer our members a platform to showcase their photography, as well as a way to connect with other people.

Sport

Trinity marked a milestone 100 years of organised sport in the college. Participation is valued as much as performance and the range and diversity of sporting activities available to Trinity students are a key part of campus life and integral to the Trinity student experience. Alongside the obvious health and wellbeing benefits, sport develops leadership and organisational skills and allows students to form friendships and build networks. Students this year made up the largest cohort of service users, at 74% (up 1% from last year).

The closure of Trinity's sporting facilities due to the Covid-19 pandemic had a seismic effect on our operations, communications, events, business and sporting activity. There were 23,502 visits in the fitness theatre, representing a 77% reduction from last year. There were 5,921 approx. recorded swipes through the pool turnstiles, down 87.5% on last year. The Sports Centre closure for over 6 months, reduced opening hours at certain periods along with the limited capacity bookings system would have contributed to this. There were 45,000 attendances at the Sport Centre from October 2020 to September 2021, this includes an estimated 4,000 for non-member entries for indoor bookings. There were two closure periods due to the Covid-19 pandemic:

- 23 October 2020 7 December 2020
- 1 January 2021 7 June 2021

Significantly these closures would have naturally impacted usage levels in a negative way and would contribute to the usage (in comparison to the year previous) being down by -78%.

Thirty-five sport scholarships were awarded across twelve sports for the 2020-21 academic year. The recipients included Irish Senior Rugby Players Kathryn Dane and Ryan Baird, Tokyo Paralympics Rowing athlete (USA) – John Tanguay, Irish 7s rugby players Maebh Deely and Deirbhile Nic a Bhaird, Irish Senior Cricket player Rebecca Stokell, Rachel Delaney, and Leah Paul, Ireland Senior basketball player Edel Thornton. Thomas Stevens (Rowing), Caron Ryan (Athletics) and Conall Hayes (Athletics) were awarded the Trever West scholarship for their fantastic contributions as ambassadors and role models for student sport in Trinity.

A significant number of Trinity's sport scholars were selected to represent Ireland at different age groups, including 12 student athletes who represented their country at senior international level. In addition, there were several notable achievements by our sport scholars throughout the year including:

- John Tanguay picking up a Silver Medal at the Tokyo Paralympics as part of the USA rowing mixed 4 with coxswain
- Ryan Baird picking up his first Irish Senior International Rugby cap
- Kate Doherty winning silver as part of the Irish 4 x 200m team at the World Athletics Relay Championships
- Edel Thornton co-captaining the Irish Senior Women's Basketball team to the final of the FIBA European Championship for Small Countries
- Cliodhna Ni She winning the Golden Boot in the Ladies Gaelic Football Championships

The Sport Scholarship Award Ceremony took place virtually on 12 November. As part of the awards ceremony a panel discussion was held with Ed Joyce, Rebecca Stokell and Ryan Baird on the theme of 'The emergence of sport from Covid-19'.

The Global Graduate Sport Scholarship programme was also extended with scholarships now available to talented international students who are looking to study at post-graduate level within the Business School or E3.

In addition, a new partnership agreement was announced this year in association with Trinity Business School and the Gaelic Player's Association. A fully funded MBA scholarship will be available for the 2021-22 academic year, and this will be followed by the launch of a scholarship programme for master's programmes at Trinity Business School for the 2022-23 intake.

In June 2021, Trinity was announced as a Basketball Ireland Centre of Excellence. The exciting new partnership with Basketball Ireland will facilitate the continued growth and development of basketball in Trinity. It will be hugely beneficial to the development of talented student athletes, as it will provide a clear pathway for them to fulfil their sporting potential at Trinity.

The Trinity Sport-led project 'Mind, Body, Boost' was awarded €391,675 in funding from the EU Commission's Erasmus+ Sport 2020 programme under the 'collaborative partnerships action' category. As lead coordinator of the project, Trinity Sport will collaborate with seven other European partners to deliver the programme over a three-year period. The aim of the 'Mind, Body, Boost' project is to encourage inclusivity and equality through sport by creating a safe health and fitness environment for third level students who need physical and mental health support.

4. **Research Activities**

4.1 Research Funding

Research activity (measured on the basis of research expenditure) of €105m represents an increase of €6m (6%) on prior year levels. The value of new awards secured in the year amounted to €151m (2019-20: €119m). This figure included €61m second phase funding for two Science Foundation Ireland Research Centres and €4.9m for a Strategic Partnership Programme, enabling collaboration with key stakeholders aiming to deliver economic and societal impact to Ireland. In 2020-21 the Exchequer: non-Exchequer ratio of research income was 64:36 (2019-20: 56:44).

Trinity's success in attracting EU funding continued in 2020-21 with the value of new awards funded under the Horizon 2020 Programme amounting to €25m (2019-20: €29m). Trinity's ranking in Europe, in terms of Horizon 2020 EU contribution across all organisations, is 52nd out of almost 33,000 institutions from 158 territories and countries, with a global ranking of 37th in terms of European HEIs. Trinity researchers secured 43% of all European Research Council Investigator awards to Ireland since 2014. While the research environment remains competitive and Trinity is well positioned in terms of EU funding success rates, the challenge for the future will be to maintain our ranking in Europe whilst also positioning ourselves for Horizon Europe. (Horizon Europe, in line with the EU's Multiannual Financial Framework, extends from 2021-27).

The rate of indirect costs for new awards (22%) compared to the Full Economic Cost rate of 59% continues to challenge the University's research support mechanisms and is an annually occurring funding gap that needs to be addressed.

In 2020-21 there were over 1,806 active research accounts led by 579 Principal Investigators. Research activity supported c.2,590 individuals in 2020-21 (1,800 staff and 790 PhD students).

Year ended 30 September 2021
29% 18% 8% 8% 7% 6% 6% 5% 5%

4.2 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:

Professors Jennifer McElwain, Seamus Martin and Daniel Kelly won ERC Advanced Grants and are pursuing research projects in botany, immunity and inflammation, and bioengineering. Their awards bring the total number of ERC Investigator Grants awarded at Trinity under the Horizon 2020 funding programme to 44, with a total value of €83 million.

A multidisciplinary team was in receipt of €10.4 million funding for a project called 4-OCEANS to assess the importance of marine life for human societies during the last two millennia. It has been funded via an ERC Synergy Grant (the first to be won by Ireland-based researchers). The 4-OCEANS team from Trinity is Professor Poul Holm, Environmental History and Professor Francis Ludlow, Environmental History.

Professor Bruce Misstear, Adjunct Lecturer in the School of Engineering and fellow emeritus, won the 2020 Presidents' Award of the International Association of Hydrogeologists (IAH). This is a prestigious hydrogeology award for societal and environmental impact. His research activities include the investigation of flow pathways of diffuse agricultural pollutants and the impacts of domestic wastewater systems on private wells.

TILDA researchers were awarded a highly competitive US National Institute of Health (NIH) grant award to research determinants of physical and brain health in ageing in September. Trinity is working with the University of Michigan, the University of Southern California, Queen's University Belfast and University College London on this key project.

In September, Dr Nicola Mastrorocco, Assistant Professor in Economics won the 2020 European Economic Association (EEA) Young Economist Award. Her research looks at police behaviour in the United States.

Assistant Professor Claire Gillan and Dr Alessandro Lunghi were awarded European Research Council (ERC) Starting Grant Awards worth €3 million in September 2020, while Al Maktoum Associate Professor, Mohamed Ahmed, recently began his project in Trinity, which was retained on the funding list from a previous round.

In October 2020, Trinity was awarded €21 million in funding by the Higher Education Authority to support over the next five years its innovative, skills-led teaching initiative 'Next Generation Teaching and Learning for the changing needs of society and enterprise'. This was the biggest allocation made across the sector under this funding programme. Trinity's proposal prioritised innovation both in modes of delivery and in content, with a firm focus on meeting industry and future skills needs.

Professor Kingston Mills, Dr Matthew Campbell and Professor Luke O'Neill won Researcher of the Year, Early Career Researcher of the Year, and Outstanding Contribution to STEM Communication awards respectively at the 2020 Science Foundation Ireland Awards in November 2020.

Four Trinity researchers secured SFI Public Service Fellowships in November. The researchers are Dr Claire McKenna, AMBER and the CRANN Institute; Dr Boris Galkin, CONNECT; Professor David Lewis, School of Computer Science and Statistics; and Dr Cormac Ó'Coileáin, School of Chemistry and CRANN. The fellowships will foster innovation within the Public Sector by supporting the development and implementation of datadriven and evidence-based approaches. The fellowships led by Trinity researchers account for one-third of the 12 that have been awarded in total.

In November, 21 investigator-led projects were awarded almost 30% of total funding granted in the SFI Frontiers for the Future Programme Awards. Minister for Further and Higher Education, Research, Innovation and Science, Simon Harris, TD, announced 71 grants valued at €53 million to support frontiers research across 12 Higher Education Institutions.

Trinity St James's Cancer Institute was awarded OECI accreditation in November 2020. The institute is the first centre in Ireland to receive this distinguished accreditation and designation fellowship and joins 53 of Europe's most prestigious cancer centres.

Professor Orla Hardiman won the Healey Foundation Award in December 2020. The award honours the work of Professor Hardiman and the international consortium she participates in, that works to better understand and find treatments for ALS/MND.

In December 2020, four researchers from Trinity won highly prestigious ERC Consolidator Awards worth €2 million each. The winners from Trinity were Professors Marcus Collier (School of Natural Sciences), Thomas Chadefaux (School of Social Sciences and Philosophy), Stephen Dooley (School of Physics) and David O'Shaughnessy (School of English).

Four researchers from Trinity won ESRC-IRC UK-Ireland Social Sciences Networking Grants from the Irish Research Council. The new awards, designed to foster the development of long-term relationships between social science researchers in the UK and Republic of Ireland have been given to Joe Barry, Adjunct Professor of Population Health Medicine; Yekaterina Chzhen, Assistant Professor of Sociology; Fiona Newell, Professor of Experimental Psychology and Martine Smith, Professor in Clinical Speech and Language Studies.

Professor Jonathan Coleman received the ERC proof of concept grant in January 2021. The Print-SENSE project will examine the economic and technical feasibility of using nanomaterial-based inks for high-performance sensing applications, particularly within medical diagnostics.

In February 2021, ADAPT and CONNECT research centres were among five to receive €193 million in investments from SFI. The investment, which will support approximately 1,060 graduate and post-Doctoral students and Research Fellows employed by the Centres, is further backed by 200 industry partners that are committing over €91 million in cash and in-kind contributions.

Alan Irvine, Professor of Dermatology in the School of Medicine was elected as a Royal Society of Edinburgh (RSE) Fellow in March 2021. He joins the RSE's current roll of around 1,600 leading thinkers and practitioners from Scotland and beyond.

Three Trinity-led STEM public engagement and education initiatives were supported as part of a new national investment of €5.2 million through the Science Foundation Ireland Discover Programme in March 2021. These projects are in coding, smart cities and data literacy.

In April 2021, eight Trinity researchers received awards from the IRC. The funds will support projects across diverse issues, including those affecting carers, senior citizens and the impact of the Covid-19 pandemic on wellbeing.

Professor Dan Bradley won a Royal Irish Academy Gold Medal in May 2021. Professor Bradley is a globally recognised pioneer in ancient genomics research, who has spearheaded such projects as the one that sequenced the first genomes of ancient Irish humans.

5. Innovation and Commercialisation

Trinity Research & Innovation (TR&I) manages and develops the interface between the internal Trinity researcher community and external stakeholders including national and international funding agencies, the venture capital community and enterprise. 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

- University Bridge Fund II (UBFII) was officially launched in May 2021. The fund follows on from University Bridge Fund I which has invested in 30 deep tech companies that have raised over €220m in co-investments. UBF II will invest €80m into the next generation of deep tech companies with global potential coming out of university system. This second fund continues the unique partnership between Atlantic Bridge and Irish Universities Trinity College Dublin, University College Dublin, University College Galway to accelerate the commercialisation of world class science from Irish Universities.
- Significant licensing and spin-out commercialisation milestones in the past year include campus company Inflazome 'landmark deal' as acquired by Roche for €380m and Silvercloud Health (2012), acquired by Amwell for over USD \$250m in July 2021
- Continued significant investment into campus companies in 2020-21: €19m in equity funding and €17.6m in non-equity funding during the year. Examples include: Danalto (€1m), TerminusDB (€3.6m), CaliberAl (€600k), Selfsense (€1m), OneProjects (€17m), Akara Robotics (€2.4m), Solvotrin (€6.7m).
- Trinity spinout companies approved as EI High Potential Start Ups (HPSU): Senoptica, Selfsense and CaliberAI
- The innovation hub for Trinity called Portal, has been designed to host Trinity spin outs, researchers and the best of the local start-up ecosystem. Starting in late 2023, it will offer space to over 300 entrepreneurs and corporate innovators, feature a 100-seat events space and other meeting spaces along with a café and public space. The business model and architectural designs are nearing completion.

Industry

Sustained and improved engagement with industry partners resulting in a record €9.3m industry awards signed in 2020-21. Examples of significant collaborations include:

- Microsoft Ireland, a collaboration focused on accelerating advancements in next-generation quantum technologies and attracting and training future world-leaders in the field. The collaboration will further strengthen Ireland's position as a key player in quantum research globally
- Ryanair, launching a sustainable aviation research centre (€1.5m investment) to engage in research around sustainable aviation fuels, zero carbon aircraft propulsion systems and noise mapping
- ONK Therapeutics, a project seeking to improve cancer therapies

Consultancy

Key highlights of Trinity's Managed Consultancy Unit, CONSULT Trinity (launched in September 2019) include:

- a total of 48 consultancy agreements signed in the reporting period
- €547,401 is the value of consultancy agreements signed in the reporting period
- Inishowen River Trust consultancy engagement was shortlisted for the KTI (Knowledge Transfer Ireland) impact awards 2021

5.1 Research Funding

During the 2020-21 academic year, 1,183 proposals valued at €368.9m were curated by the Research Development Office. Announcement of new Investment in SFI Research Centres included: SFI ADAPT Centre - €42m over six years; SFI CONNECT centre - €39m over six years. In the same period, the Contracts Office processed over 1,200 research contracts with a combined total value of €170 million, of which 782 awarded to Trinity (worth €135 million) and 438 (worth €35 million) issued to external entities.

Trinity has the highest Horizon 2020 drawdown of any third-level institution in Ireland, exceeding the next best performer by €42 million. Trinity researchers secured 255 awards to date with an overall value of €159.2m (10-2021). The University performance compares well to our peer European Universities in the League of European Research Universities (LERU) where Trinity ranks fourth in the number of ERC awards per academic staff. Trinity is currently ranked 33rd of all Higher Education Institutions in Europe.

Furthermore, this research excellence is also evident in the level of collaborative agreements with industry which exceed the baseline set by the HEA Compact by over 30%, returning 63 collaborative research agreements with a minimum of €25,000. The level of repeat business shows that these relationships are growing.

5.2 Intellectual Property

The Office of Corporate Partnership and Knowledge Exchange received 48 disclosures of novel intellectual property created by Trinity researchers, filed 16 new patent applications, and granted 32 commercial licences. The formation of 8 new Trinity campus companies was approved, one of the highest ever for Trinity in a given year.

2	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
Invention disclosure forms	58	53	60	61	80	62	55	48
Patents	23	18	17	18	19	13	27	16
Licences*	30	23	34	13	27	16	26	32
Campus and spin-out companies	4	3	2	4	5	4	5	8

* Refers to licences, options and assignments

5.3 LaunchBox and Blackstone LaunchPad

The highly regarded student incubator programme LaunchBox, Tangent's Student Accelerator, has supported over 90 start-ups that have gone to raise over €75m in funding and investment since its inception in 2013. Past alumni include Artomatix who were acquired for over \$60m in 2019 and Foodcloud who have distributed over 100m meals across the UK and Ireland through reducing food waste. The founder of Foodcloud, Iseult Ward, continues to support Trinity's student entrepreneurship mission as a member of the Tangent board.

Ten student-led start-up teams were selected to participate on LaunchBox over the Summer of 2021 – benefitting from coaching, expert advice, seed funding, and access to incubator space and facilities. Due to the ongoing COVID-19 pandemic, LaunchBox once more was run online but this had no negative effect on the quality of the teams that participated or on the progress they made.

Participants on the programme this year included furniture upcycling platform Refunk, Diglot a solution to help you learn languages through the books that you love and One Sure Thing a platform to support people to make end of life planning easier. The winner of LaunchBox 2021, Field of Vision had an incredible year where they were also winners of the Enterprise Ireland Student Entrepreneur of the Year award. Their solution allows visually impaired sports fans to enjoy their favourite sports through a combination of machine vison and a physical device to track the game in real time through touch.

LaunchBox is just one avenue through which Trinity students, both undergraduate and postgraduate, can nurture their entrepreneurial skills. The Blackstone Launchpad powered by Techstars campus entrepreneurship programme operates from Tangent, Trinity's Ideas Workspace, and mentors student entrepreneurs, connecting them with the start-up ecosystem internationally.

6. Human Resources

Human Resources' purpose is to support and strengthen individuals, teams and the University performance and we do this by developing and delivering solutions that enable Trinity to foster an effective and flexible organisation, which values all members of its community equally

Our HR Partner Team is the conduit through which many of our HR services are delivered to the College Community.

Our work falls under three main pillars:

- Talent: Recruitment, Development and Performance
- Effective administration
- Staff Engagement

6.1 Talent: Recruitment, Development and Performance

Trinity revised its recruitment policy which was approved and implemented in 2019 with ongoing training and workshops delivered in 2020-21 to support the embedding of this policy. The University continues to be an attractive employer in the job market with a high level of job offer acceptance by the top-ranked candidates for this period.

In 2020-21 the Recruitment team advertised 402 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 6,500 applications were received for the advertised posts; 397 appointments were made, 96 to academic posts and 301 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 1,346 contracts in 2020-21 for appointments taking place outside of Recruitment (Research posts; change of contract terms; contract renewals). This is 197 fewer contracts than in the previous year.

In 2020-21 the Staff Performance and Review Team completed the Senior Academic Promotions Call 2019, in which 122 applications were received, and 42 candidates were successful for promotion. Of the candidates promoted, 24 were promoted to Associate Professor, 15 promoted to Professor in and three were promoted to Professor of (Personal Chair). The Senior Academic Promotions Call 2020 was launched in December 2021 and the process is due to conclude in 2022.

Over this period the Senior Academic Promotions Committee received five applications for retention of which, five were successful.

Over this period, the Junior Academic Progressions Committee interviewed four Assistant Professors on Tenure Track for their Final Tenure Review. Four were successful and following Board approval permanent contracts were issued to them. In addition, the Junior Academic Progressions Committee launched a call on 15 November 2019 for candidates currently held at the merit bar to come forward for review; 86 applications were received. This call encompassed three merit bar calls with different implementation dates (i.e., 2017-18, 2018-19 and 2019-20) for candidates due for merit bar review. Of the 86 applications, 36 were reviewed by the Committee during 2020-21 and to date all 86 reviews have been completed. 76 Applicants were successful and ten unsuccessful.

The Clinical Staff Promotions Call (2021) launched in March 2021 and was ongoing at the end of this period.

Professor Appointments

In 2020-21, the Faculty of Arts, Humanities and Social Sciences appointed two professors - Professor of Political Economy and Professor of Strategic Management (2018) both commencing in 2022. The Faculty of Science, Technology, Engineering and Mathematics (STEM) appointed three Professors: the Director of Connect/Professor of Future Communication Networks who commenced in January 2021, the Head of School of Computer Science and Statistics/Professor of Artificial Intelligence who commenced in September 2021, and the Professor of Mathematics (2020) who commenced in 2022. Two Professors who were appointed in the previous period in the Faculty of Health Sciences (FHS) commenced in January 2021; the Professor of Palliative Medicine (2009) and the Professor of Population Health Medicine (2009).

Senior Administrative Posts

Appointments made to Senior Administrative positions during 2020-21 included: FIS Team Manager (FSD), Professor Director Micro-Credentials (Trinity Teaching and Learning), TAP Acting Director (Trinity Teaching and Learning), Director of Academic Registry (Academic Registry), Internal Auditor (Secretary's Office), College Solicitor (Secretary's Office), Commercial Director (CRU), Deputy Director of HR, PMO Director (PMO), and Chief of Staff (Provost's Office).

Development

Two hundred and twenty learning events were delivered in 2020-21, with almost 3,600 participants across the following categories

- Professional & personal skills development for all staff
- Assistant Professors Development Programme for Years 1 4
- Leadership Development Programmes
- Bespoke team-based interventions across the University
- Talent interventions including mentoring for Academics (90+ mentors), coaching interventions
- Wellbeing Series

The Learning & Organisation Development (L&OD) Team continued to deliver an on-line programme, with the emphasis on practical management and leadership skills to lead in continued uncertainty, and on resilience and wellbeing initiatives for all employees to support them to navigate the impact of the pandemic. The programme was designed based on insights from the Covid Staff Wellbeing Survey 2020 and was flexible to include rapidly emerging needs of employees e.g., Parents Series was introduced to support parents who home schooled children to balance work/life responsibilities and conflicts. The online programme format was positively received by employees and enabled increased participation rates and reach across the community.

There were several new development initiatives as well as enhancement to existing offerings:

- Aurora Women's Leadership Development Programme This programme was further evolved to facilitate regular community of practice opportunities aligned with the Aurora programme.
- New management skills programmes were introduced which focused on providing practical skills and tools to lead in a remote and blended environment, as well as offering opportunities for social learning through the modular design of programmes.
- Professional skills programmes were continually evolved to meet the emerging needs of all employees for the on-line environment, e.g. creative collaboration in an online world, Disc Insights psychometric was introduced into many programmes to support effective communication.
- Bespoke interventions; team and 1:1 profiling using Insights psychometrics
- Professional Skills for Research Leaders Programme was run with 29 participants. The masterclass series to support the programme participants was evolved, and 1:1 support for participants was introduced.

- Feelings of isolation and disconnection were experienced by many during this time. Connect over Coffee events were run to provide a social outlet for employees on a weekly basis and Researcher specific online meet ups were introduced.
- Virtual Cafés were introduced to facilitate the sharing of knowledge across the university
- Designed and hosted the IUA HR Conference on-line with almost 300 participants, facilitating the largest participation at the event since its inception.

Online Learning

LinkedIn Learning usage dropped below previous levels to under 4,000 active users in this period. Feedback indicated that employees did not wish to engage further online self-directed learning. LinkedIn Learning catalogues continued to be developed to support all programmes; however, they were offered as optional pre-work rather than pre-requisites. Comprehensive catalogues were also developed to link to the Trinity Competencies to LinkedIn Learning resources and are published on the Trinity website. Vitae continues to be offered to all academic and researcher staff, and those related to research as a significant online resource portal.

6.2 Effective People Operations

Ensuring we have effective, efficient, and easy to use HR processes is a key objective of the HR Department. Having upgraded the CORE HR system in 2019, HR have a multi-year programme of refining and streamlining HR processes which will continue over several years.

Completed processes that were rolled out are Recruitment Transformation, which includes a new policy and procedure now accessible online, including a Manager Toolbox. Following engagement across the college, a Casual pay/Occasional working policy has been developed and rolled out with the focus now moving to automation of the process.

eLeave (electronic recording of leave) was developed with the pilot ongoing and the roll out of the system planning for 2022. Processes under development include streamlining the research nomination process, enhancing the staff requisition process and streamlining and updating probation process. Process improvement of all HR processes is a continuous process.

HR Dashboards at University level and at HR Operational level are circulated monthly to Senior Management to give a bird's eye view of activities, and staff numbers in their area and across the University.

6.3 Employee Engagement

Employee Voice: A staff and student COVID Survey called 'Stay Together and Stronger' was developed and conducted by Trinity Business School in collaboration with Human Resources in mid-2020. The findings and insight from this were used to inform the approach to staff wellbeing and the prioritisation of initiatives as evidenced in the learning interventions supported over this period. A follow-on survey has been planned which will be used to inform the next stage.

HR and Trinity Communications continue to deliver the internal informal communication tool called the 'Weekly Wrap'. While this commenced as a pilot project it has been rolled out across the University. Its purpose is to keep staff across the University connected with each other and what is going on.

Engagement workshops across the University took place to support the development of the Blended Working Policy (Hybrid Working) with the outputs being used to shape the Universities pilot policy for launch in 2022.

Additional workshops/focus groups were also conducted across the college to support the development of the Dignity and Respect policies. These sessions are essential to ensure that policies developed are representative of the full college community.

The Employee Relations team had another very busy year providing best practice advice, support and coaching to the College community on the management of people issues. The team built on their close relationships with trade union representatives, heads, and managers to ensure a harmonious and positive work and study environment for staff and students. The Employee Relations team continued to support and advise on COVID work and leave arrangements providing updates throughout the year as well as assisting people managers with overcoming difficulties in advance of returning staff to the workplace for the upcoming 2021-22 academic year.

Due to COVID-19 the Workplace Relations Commission (WRC) continued on-line for much of this period and the team led out for the university on individual and collective staff issues at 17 WRC Conciliation Conferences, three Adjudication Officer investigations, two Labour Court hearings. In addition, the team assisted Managers/Heads with internal workplace investigations under grievances and disciplinary processes in the period.

7. University Initiatives and Key Events

There were several new initiatives and key events in Trinity during the academic year 2020-21.

In April 2021, Professor Linda Doyle was elected to become Provost of Trinity, the first woman to ever hold this role in the University's 429-year history. She is the 45th Provost of the University and took over from Provost Dr Patrick Prendergast on 1 August 2021.

Trinity unveiled a new curriculum for undergraduate students in October, which places emphasis on critical thinking, global citizenship, engagement with employers and flexible learning as the culmination of the Trinity Education Project (TEP). It was launched by the EU Commissioner for Innovation, Research, Culture, Education and Youth, Mariya Gabriel with the Minister for Further and Higher Education, Research, Innovation and Science, Simon Harris, TD.

The Irish Government gave €25 million in funding to protect and preserve the heritage of the Old Library in May 2021, after Dublin City Council approved plans months earlier. Minister for Housing, Local Government and Heritage, Darragh O'Brien, and Minister of State for Heritage and Electoral Reform, Malcolm Noonan made the announcement which marked the most significant funding award for the cultural heritage sector in 2021.

A new Book of Kells Treasury and Display case was unveiled at the start of the academic year. This provides a more inspiring visitor experience and signals a revitalisation of the culture, heritage and tourism sectors as the as the country emerges from COVID-19.

Trinity is commissioning four new sculptures of women to display in the Old Library. The scientist Rosalind Franklin, the folklorist, dramatist and theatre-founder Augusta Gregory, the mathematician Ada Lovelace and the writer and pioneering women's rights advocate Mary Wollstonecraft have been chosen from a list of more than 500 suggestions. This is the first time in over a century that the University has commissioned new sculptures for this prestigious location.

Trinity is embarking on an extensive project to examine, interrogate and reflect on its complex colonial legacies. An open competition was called for a new 24-month postdoctoral research position based in the School of Histories and Humanities and the Trinity Long Room Hub Arts and Humanities Research Institute. The principal investigators for Trinity's Colonial Legacies Project are Dr Ciaran O'Neill and Dr Patrick Walsh, School of Histories and Humanities.

In March, Trinity Business School joined the elite top 0.6% of business schools globally. The School has become triple-accredited, having been awarded accreditation from AACSB International, AMBA and EQUIS. Trinity's status as an internationally-recognised heavyweight will make its graduates some of the most sought-after job applicants, and will ensure that Irish-based multinational corporations, as well as small- and medium-sized businesses, invest in domestic talent.

Trinity's commitment to gender equality was recognised by five new Athena SWAN bronze awards in September, going to Schools of Social Work and Social Policy, Physics, Genetics and Microbiology, Psychology and Law. Trinity's Schools of Histories and Humanities, Computer Science and Statistics, and Engineering secured Athena SWAN Bronze awards in the March round of awards.

Tánaiste Leo Varadkar T.D. delivered the Trinity Monday Discourse in April 2021, commemorating Dr Noel Browne, Deputy and Minister for Health, 1948-1951. Dr Noel Browne (1915 – 1997) was made an Honorary Fellow of Trinity in May 1994, at the age of 74.

Trinity welcomed Justice George Birmingham as the new Judicial Visitor in November. Justice Birmingham is since 2018 an ex officio member of the Supreme Court as President of the Court of Appeal. He takes up the position as Judicial Visitor following the resignation of Dr Justice Maureen Harding-Clark who has served with distinction as the Judicial Visitor since 2009.

A new Beyond 2022 Artist in Residence, funded by the Government, will create new works and encourage public engagement with the Decade of Centenaries in collaboration with the Trinity Long Room Hub. Minister Catherine Martin T.D. announced the new Artist in Residence scheme which will reflect on the Decade of Centenaries Programme, by drawing on the rich collections held in Ireland's National Cultural Institutions and other bodies.

In February, Trinity marked its new membership of the University of Sanctuary Network. This means that Trinity will practice, and work to sustain into the future: a commitment to learning – especially about migration, refuge and asylum; ensuring a culture of welcome, especially for refugees and asylum seekers and sharing our ideas and practices with others.

RTÉ and Trinity Access launched a new Tech2Students campaign to bridge digital inequalities in February 2021. This project aimed to secure 5,000 donated laptops or €1 million for devices needed for young people around the country who are disconnected from their teachers and other students during remote learning due to COVID 19.

A major digitisation initiative of the Library of Trinity College was launched in March 2021. It will conserve, catalogue, curate, digitise and research unique collections of national importance, making them accessible to a global audience, from schoolchildren to scholars. Using the most advanced technology the Library's new Digital Collections platform will showcase the breadth of these collections, ranging from precious manuscripts to scientific papers.

A Faculty forum celebrated Trinity's newly named Faculty of STEM in March. The name change showcases more clearly just how the disciplines within the faculty contribute to the technologies, devices and materials that make a difference to our lives, and the health of the planet.

The Brendan Kennelly Literary Archive was launched in April at a celebratory online event marking the late poet's eighty-fifth birthday.

The Trinity St James's Cancer Institute, jointly operated by Trinity and St James's Hospital, named Professor Maeve Lowery and Professor John Kennedy as joint directors. An Taoiseach Micheál Martin made the formal announcement in June.

Sustainability Achievements

In April 2021, Trinity was named 6th best university in the world in terms of Sustainable Development Goal 5 Gender Equality and ranked in the top 50 in 7 total categories in the 2021 University Impact Rankings from Times Higher Education (THE) based on the Sustainable Development Goals.

Trinity joined a European Network project called UNI-ECO, working together with four other Universities: University of Montpellier, Utrecht University, University of Barcelona and Eötvös Loránd University (ELTE), Budapest to share best practices in sustainability and promote University initiatives on biodiversity and climate action. Students play a key role in the exchange of knowledge and ideas, central to this was a summer school held in 2021 which Trinity hosted virtually. Students from each university worked together to 'hack' sustainability issues and several great initiatives came from this including funding for two Trinity students to carry out an awareness campaign on cheap and sustainable alternatives for period hygiene.

The first phase of a biodiversity audit of Trinity's main campus was completed in the summer of 2021 by students, researchers and academics together, quantifying the habitat and species diversity across the 47acre College Green campus. This report will inform how we improve biodiversity on campus and also serve as a tool for research to benefit students and the wider community. The Green Campus Committee established nine new subcommittees to work on sustainability topics, to enable ground-up activity. Ninety-four students and staff have joined the subcommittees which are engaged in a wide variety of activities, from assisting with the biodiversity audit (above), to supporting refugee students applying to third level education, to communication campaigns and vegan catering options on campus.

Trinity partnered in 2021 with Dublin City Council to create sustainability internships at DCC. Twelve students were accepted to work on sustainability related projects (sustainable transport; water conservation; reducing DCC vehicle fleet emissions; review of local climate change legislation; circular economy; Just Energy Transition, to name a few) over the summer months. These internships supported climate and biodiversity work at DCC while providing professional sustainability work experience for students.

For the third year, student residents were recruited to join the Green Campus Residence Programme, an awardwinning programme which trains residents on climate change, energy, water, resource consumption and biodiversity. This interactive education programme shares life hacks and solutions for low carbon living on campus, and beyond.

Plean Bee, a documentary, examined how the All-Ireland Pollinator Plan is reversing pollinator declines. It launched on World Bee Day on TG4. It showcased the All-Ireland Pollinator Plan, which was developed by a cross-sectoral group of stakeholders and co-founded by Jane Stout, Professor in Botany in Trinity's School of Natural Sciences.

8. Capital Development Programme

8.1 Projects

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.

Printing House Square – Student Accommodation

Building works were paused due to Covid-19 restrictions for Trinity's new 250-bedroom student accommodation building on Pearse Street, but due for completion end of summer 2022 and this 13,000 sq.m. 9-level building will also have student services space, a new Health Unit and Sports Facilities.

The Martin Naughton E3 Learning Foundry

Trinity appointed internationally renowned architects Feildon Clegg Bradley to this project and following receipt of planning permission from Dublin City Council for this new Engineering, Environment and Emerging Technologies building, we have appointed JJ Rhatigan as main contractor. The project will take a few years to complete and will provide a much-welcomed new route through the campus to the east end of College.

Historic Accommodation Buildings

Architects Pascal+Watson have designed careful restoration plans for a significant refurbishment of the 320year-old Rubrics, and the Chief Steward's House. We received planning permission and an on-budget tender and are proceeding with the works carefully in this, our oldest, building with an incredible history. It will be restored for use as accommodation, with support academic meeting and collaboration facilities on the ground floor.

Old Library Redevelopment Project

With our design team Heneghan Peng Architects, we received planning permission for the redevelopment of the Old Library (built c.1712), including the design for the new exhibition and works to the Treasury. This project will include critical improvements to the Old Library to ensure the preservation of one of our finest buildings and will create an environment suitable for our unique and distinct collections.

Student Accommodation - Dartry Halls of Residence

We have commenced a follow-on application for planning permission for our student accommodation project under the Strategic Housing Development planning system to build 360 bedspaces in Trinity Hall, Dartry, and we will receive an outcome from this planning process at the end of the summer.

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 summer 2022. 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, and in particular, use of the classroom stock in light of the Covid-19 pandemic. Trinity is committed to providing the best student accommodation possible and continues to work through a programme of refurbishments in campus accommodation.

We have received also Planning Permission for the first innovation and entrepreneur building known as 'Portal' in the Trinity East Campus and will go to tender for this project in 2022. A number of other critical major repair and conservation projects are complete or underway, such as the Museum Building re-roofing, railings restorations, and critical electrical and mechanical infrastructure.

8.2 Energy Conservation

Energy Use

and just over 43 million kWh of natural gas (a 1.1% reduction from previous year)¹.

In 2020-21 Trinity's buildings consumed 32 million kWh of electricity (a 1.5% reduction from previous year)



2021 was another exceptional year with the impact of COVID-19. Since mid-March 2020 the majority of teaching changed to remote teaching or a version of hybrid teaching and this continued into 2021. Activity levels in some buildings dropped dramatically; some buildings had to be fully operational despite limited dispersed occupancy; extended operating hours of ventilation plant was required to comply with guidance on safety but also extended operating hours of some libraries and research laboratories.

As the chart above illustrates, the most significant reduction was in electricity use, which has a more direct relationship to occupancy than gas.

Energy-related Carbon Emissions

Energy-related CO2 emissions in 2020-21 were 19,900 Tonnes, 45% of which was heating fuel. As electricity will be largely decarbonised at a national level, the decarbonisation of heating is our primary challenge.

¹ Data based on SEAI M&R and differs from methodology used in previous years.

Energy Projects

The main energy-related project completed in 2021 was in TTMI St. James's Hospital, involving the replacement of a chiller and installation of variable speed drives on multiple pumps.

Planned initiatives include:

- Hamilton AHU upgrade, planned for completion in 2022, involves replacing ten Air Handling Units with high efficiency units incorporating heat recovery and heat pumps. This will effectively eliminate fossil fuel heating in the building, providing a valuable decarbonisation demonstration project.
- Moyne Institute HEA-funded "Pathfinder" energy upgrade involving lighting, HVAC, fabric and renewable heating, is in design stage. This is another valuable decarbonisation demonstration project.
- Berkeley Library
 - Ground floor lighting, planned for 2022, will achieve savings of circa 15,000kWh.
 - Ventilation upgrade, planned for 2022.
- Trinity Centre St. James's Hospital ventilation upgrade planned for 2022.
- Lloyd upgrade lighting to LED planned for 2022.
- The transition from fossil fuel to electric machinery by Grounds & Gardens continues.

New Buildings & Major Refurbishments

Printing House Square: During the year, works on the project continued. 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.

E3 Learning Foundry: Works on site have now commenced to deliver this 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. Following a similar high sustainability agenda, the design development for new projects will be required to eliminate on site fossil fuel and to include extensive onsite renewable energy generation from both Air/Ground Source Heat Pumps and roof mounted PV arrays if we are to meet carbon reduction targets.

Rubrics: The Rubrics, which was constructed between 1699 and 1702, is a unique building of architectural, historical, archaeological, cultural and social importance that has been afforded protected status under the Planning & Development Act, 2000 (as amended) and recorded monument status under the National Monuments Act, 1930.

We have developed a low carbon Fabric Retrofit Strategy for the Rubrics Building, with the intention of improving the thermal efficiency of the Rubrics Building as far as is reasonably practicable without jeopardising the material stability or historic character of the building.

This holistic retrofit approach, balances heritage conservation, fabric preservation, energy performance, embodied and operational carbon emissions and occupant wellbeing. Best practice guidance and the procedure recommended by I.S. EN 16883:2017 Conservation of Cultural Heritage – Guidelines for improving the energy performance of historic buildings has been followed to identify the most suitable upgrade options. Data from on-site measurements and surveys was used to minimise the chance that any unintended consequences will result from the works.

National Climate Targets

The University's energy conservation target for 2020 was linked to the National Energy Efficiency Action Plan 2 (NEEAP 2), which had a public sector target to improve energy efficiency² by 33% by 2020. As illustrated below, Trinity achieved a 35.9% efficiency improvement; the impact of COVID-19 lockdowns and reduced activity was a contributing factor.



Energy Performance Indicators - 2021

The Government's Climate Action Plan identifies more ambitious targets including a 50% energy efficiency improvement and a 51% absolute reduction in greenhouse gas emissions by 2030. The absolute carbon reduction means the energy use associated with any new buildings will need to be offset by reductions elsewhere. As previously noted, the decarbonisation of heat, is the primary challenge.

The scale of the challenge will be significant and resources are being increased to build on the progress we have made to date on improving our energy efficiency.

2 Energy efficiency/performance in Trinity is measured in primary energy use per m2 of "equivalent floor area" relative to a 2006-08 baseline.

9. Philanthropy

The year 2020-21 was seminal for philanthropy in Trinity: in summer 2021, just two years after the launch of the public phase of the philanthropic campaign, Inspiring Generations, we hit our campaign goals of raising €400 million in donations and 150,000 hours in volunteering. This was an exceptional achievement, particularly given that lockdowns from March 2020 prevented in-person fundraising events.

When we publicly launched Inspiring Generations in May 2019, we had already raised €272 million. By May 2020, the campaign has raised a total of €342 million and it was Eric and Barbara Kinsella's gift of €30 million in summer 2021 that enabled us to reach our target. This was the third gift of over €25 million to Inspiring Generations, which mobilised a total of 11,424 donors from around the world.

The campaign has transformed Trinity's fundraising performance. Steady state fundraising has grown from €10 million per annum at the beginning of the campaign (3-year moving average 2009-11) to €35 million in the final year (2019-21). Benchmarked against peer universities in the UK, Trinity emerges as particularly impressive. The Campaign Impact Report, carried out by More Partnership (January 2022), found that among UK universities including Oxbridge, Trinity is second only to UCL in terms of efficiency (e.g., funds raised per staff in philanthropy/advancement), a finding supported by the amount of money raised per euro spent. The contribution from philanthropy to Trinity's overall budget more than doubled from 3% at the start of the campaign to 7.7% in the final year.

Campaign projects

The priority projects of Inspiring Generations covered four broad themes:

- Building a campus for the 21st century: priority capital development projects including the new Trinity Business School, a new Law School, Redevelopment of the Old Library, E3;
- A 'New Generations' programme to bring talent to the university through student scholarships, investment in the Trinity Access Programme, and creating new Professorships and tenure-track academic posts;
- **Cherishing the Humanities:** investment in the arts and humanities including the Trinity Long Room Hub and the Trinity Centre for Literary and Cultural Translation
- Meeting Healthcare challenges: building the Trinity-St James's Cancer Institute; investing in Trinity's world- leading ageing research; the Trinity Covid-19 Immunology Project.

A number of stand-out initiatives were funded under these themes in the academic year 2020-21, for example:

- As part of E3 and New Generations, the Ryanair Sustainable Aviation Centre was launched in April 2021. Trinity is using a €1.5 million donation from Ryanair to seed a multi-disciplinary team to engage in research around sustainable aviation fuels, zero carbon aircraft propulsion systems and noise mapping.
- As part of New Generations and Trinity Access, students and friends of Professor John G. Byrne endowed a permanent scholarship fund for Trinity Access students studying computer science. €750,000 of the €1 million target has been raised and the inaugural two Professor John G. Byrne Scholarships were awarded in December 2021.
- As part of Healthcare Challenges, the Trinity Covid-19 Immunology Project which launched in May 2020 with a foundational gift of €2.4 million from AIB gained seven new corporate donors over the year, with gifts ranging from €5,000 to €100,000.
- As part of Cherishing the Humanities, philanthropist Beate Schuler donated €400,000 to fund the Schuler Democracy Forum in the Trinity Long Room Hub for a three-year period, 2021-24. The Forum seeks to engage policymakers, civic society and the media in research and engagement activities that address the theme of the media and democracy.

While the campaign is now closed, many of the Inspiring Generations projects remain the focus of fundraising in coming years.

Anchoring 'the philanthropic university'

Philanthropy is now materially meaningful to the college's economic model, and the campaign has successfully anchored the idea of 'the philanthropic university' within the Trinity community of staff, students and alumni.

The Provost's Council, established 2016 and instrumental in running of the campaign, has proved to be a highly successful vehicle through which top donors and volunteers are engaged and brought closer to the college.

The ambition of TDA remains high as we look beyond the campaign to the next phase for philanthropy in Trinity.

10. Financial Statements for the Year-ended 30 September 2021

The financial statements for the year-ended 30 September 2021, as approved by Board on 24 March 2022, can be viewed at the below:

https://www.tcd.ie/financial-services/financial-statements/



Appendix I

Attendance at Board Meetings 2020-2021

The total number of meetings held during the year was 13.

Ex-officio members:

Provost (Dr Patrick Prendergast) (13), Vice-Provost/Chief Academic Officer (Professor Jürgen Barkhoff) (13), Senior Lecturer/Dean of Undergraduate Studies (Professor Kevin Mitchell) (13), Registrar (Professor Brendan Tangney) (13), Bursar/Director of Strategic Innovation (Professor Veronica Campbell) (13).

Elected members:

Professor Khurshid Ahmad (13), Professor Sarah Alyn Stacey (6)*, Professor Louis Brennan (13), Professor Andrew Burke (11), Mr Kevin Byrne (12), Professor Daniel Faas (12), Ms Stephanie Farrell (2)**, Mr David Grouse (13), Professor Rose Ann Kenny (10), Professor Caitriona Leahy (6), Professor Kathleen McTiernan (9), Ms Rachel Matthews McKay (9), Professor Ross McManus (13), Professor Andrea Nolan (6), Professor Diarmuid R Phelan (12), Professor Lorna Roe (9), Professor Aidan Seery (13), Professor Fintan Sheerin (11), Professor John Walsh (11).

External members:

Ms Jill Donoghue (10)

Student members:

Mr Eoin Hand (13), Ms Leah Keogh (13), Ms Megan O'Connor (13), Ms Gisele Scanlon (13).

- * Prof Sarah Alyn Stacey temporarily stepped aside from Board on 26th November 2020 before resuming her membership on 26th April 2021. Prof Catriona Leahy replaced her during this time.
- ** Ms Stephanie Farrell's term on Board was extended as elections for the TASS constituency, due to exceptional circumstances of the Covid-19 pandemic, did not take place until the Michaelmas term. Ms Rachel Matthews then replaced Ms Farrell on 16th December 2020.

Appendix II

Board Expenses 2020-2021

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 2020-21.

