University College Dublin
Ireland's Global University

REPORT OF
THE PRESIDENT

SEPTEMBER 2020
– AUGUST 2021

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University College Dublin
National University of Ireland, Dublin

September 2020 – August 2021

For presentation to the Governing Authority of
University College Dublin, National University
of Ireland, Dublin at its meeting on
16 December 2021.

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OVERVIEW BY THE PRESIDENT

I am pleased to present my eighth report as President of University College Dublin. This report highlights the many successes and achievements across the University this year.

This past year was another where we had to once again continue to adapt to the constant change driven by the impact of the pandemic. I am so proud of our entire UCD Community, their flexibility and adaptability throughout allowed us to provide continuity of delivery for teaching, learning and research. I thank each and every one of them for their dedication, courage and resilience throughout another extraordinary year for the University.

Global efforts culminated in the approval of a vaccine against COVID-19, the extensive roll-out of which opened up society over the course of the year. UCD researchers were at the forefront of the development and roll-out of the vaccine, and key players in managing the many impacts of the pandemic – you can read more about the University's response to the pandemic in the next chapter of this report. The successful vaccine roll-out in Ireland resulted in the easing of some restrictions during 2021, allowing some aspects of life to recommence and open up across the summer months.

Extensive preparations were put in place in September 2020 for a full return to campus for our students, as well as faculty and staff. Sadly, further lockdowns across the year meant that our return to campus was put on hold and we continued to provide blended teaching and learning to our students throughout. As we now look forward to a new trimester in September 2021 and continue with our preparations, we hope to once again see our beautiful campus coming back to life.

Rising to the Future

During the year, we highlighted an opportunity to move ahead more quickly with Enabler 4 of the University Strategy 2020-2024: Rising to the Future – 'Implement advanced systems and services to support our operation' – than we had initially envisioned. The proposed solutions will provide us with an extraordinary opportunity to become a model of digital transformation in a higher education environment in line with the ambition set out in our strategy. The solutions will involve change, allowing colleagues across the University to contribute to the transformation of our provision of services, while enhancing their own career development.

Through consultation with the wider UCD Community, we have identified common themes and areas for consideration. We have engaged with a team of consultants from PA Consulting to identify holistic solutions that will address the needs of our students, faculty and staff. The Enabler 4 Steering Group was expanded to include all members of the University Management Team.

The pandemic forced us to deliver services at-distance and to embrace IT systems at a speed which could not have been imagined when we wrote the strategy. The pandemic experience has also generated interest in preserving flexible working practices and

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increased ability to work from home. We are working to identify which positive aspects of hybrid working can continue without impacting adversely the vibrant campus experience of students, faculty and staff or the efficiency and effectiveness of our services.

Our future planning will ensure that we preserve the efficient and effective working practices we have developed and leverage the learnings of this time to produce the roadmap for digital transformation envisaged in the Strategy.

In many ways the challenges of the pandemic have helped to organically embed our four strategic themes across our ways of working. The structured approach to embedding the themes we had indicated in the Strategy document has been delayed as our efforts focussed on crisis management. While we are still effectively in crisis management mode, we will take the opportunity to identify people and put in place structures to support a more formal approach to the strategic themes.

Governance

Professor Joe Carthy finished his second term as College Principal for the UCD College of Science on 31 August 2021. I acknowledge

23rd

place global ranking for Veterinary Science in the QS World University Rankings

his significant contribution as College Principal and as a member of UMT, and thank him for the vision, commitment, wisdom and compassion he has demonstrated over his ten years in the role.

The Governing Authority agreed to appoint Professor Jeremy Simpson to succeed Professor Carthy as Principal for the UCD College of Science with effect from 1 September 2021. I congratulate Professor Simpson on his appointment and look forward to working with him in his new role.

The Governing Authority reappointed Professor Sarah Prescott to the position of College Principal for the UCD College of Arts and Humanities for a second five-year term commencing 1 September 2021. I congratulate Professor Prescott on her reappointment.

In November, the Governing Authority approved recommendations regarding a revised Academic Council composition which include a much simplified and reduced council membership, gender quotas, a larger proportion of elected positions and electronic elections.

Rankings

For the second year in a row, UCD has seen an improvement in its position in the QS World University Rankings with an upward movement of eight places to 177. Academic reputation is the most heavily weighted individual metric at 40% and this year is the most improved indicator for UCD moving up 12 places.

UCD was named among the best universities globally in 38 subjects in the QS World University Rankings by Subject. Our best performance was in Veterinary Science, which has risen nine places year-on-year to rank 23rd globally and was Ireland's highest-

UCD's new student residences.

ranking programme in this year's listings. Also included in top 50 were three other subject areas, with eight subject areas ranked in the QS top 100.

UCD has again topped the list as the number one ranked university in Ireland, according to the US News & World Report's Best Global University Rankings. UCD now sits at 226th globally and 97th in Europe – a rise of five places over last year's rankings.

UCD is ranked 22nd in the Times Higher Education Impact Rankings, an increase of 12 places compared to 2020's benchmark of universities against the United Nations' Sustainable Development Goals (SDGs).

We maintained our position as number one in Ireland for graduate employability in the QS World University Graduate Employability Rankings, an endorsement of the success of our graduates and the quality of our education.

Finance

For the year ending 30 September 2021, the University is expecting to generate an operating surplus of between €15 million to €20 million on its consolidated activities. This favourable expected outturn for the year, which compares to a prior year consolidated operating surplus of €7.8 million, has been achieved in very difficult circumstances due to the adverse impact of the COVID-19 pandemic, which resulted in reduced student residences and commercial income streams due to the closure of facilities for part of the year.

We estimate the cost of COVID-19 to UCD has been in the region of €30 million over the last two financial years. A number of unprecedented measures had to be taken to manage expenditure and to protect cash balances, once the University went into

// We used government funding to support students in many ways and we continued to deliver our services, plan for the academic year, and welcome our new students to UCD //

€30m

in estimated costs due to COVID-19 over the last two financial years

lockdown. These mitigating measures should ensure that the University's finances are sufficiently robust to absorb any further adverse impacts from the pandemic and, while there are still significant uncertainties around non-Exchequer income sources, the University maintains that it can sustain its operations in the current volatile economic environment.

Education

When we reflect on our education provision and student experience during the past year and the challenges posed by the pandemic for everyone both personally and professionally, we can be truly proud of our achievements. We delivered an educational experience for our students that allowed them to progress in their studies and graduate with their degrees at a time when many sectors were unable to provide a service.

We used government funding to support students in many ways and we continued to deliver our services, plan for the academic year, and welcome our new students to UCD. In addition, we worked consistently to develop new initiatives and our students, faculty and staff developed new skills to work in an ever-changing and uncertain context. Timetabling and scheduling of classes was both a complex and challenging task in the context of changing public health guidelines and government decisions.

Despite a disrupted Leaving Certificate experience, a new approach to calculated grades and uncertainty in relation to returning to campus, we witnessed a 16% increase in CAO first preferences and points for all UCD degrees. We worked successfully with the Higher Education Authority to provide additional places to meet demand and we witnessed a significant increase in taught graduate recruitment. Our numbers of EU applicants doubled, and they were provided with excellent supports through the application process.
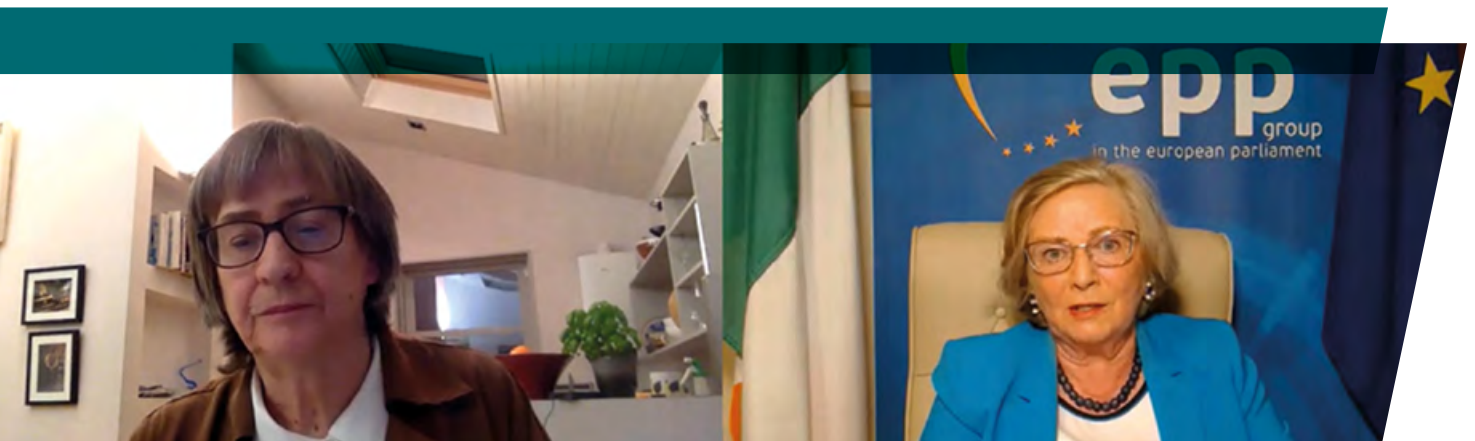
The Gender Impacts of COVID-19 – In March, 2021 to mark International Women's Day, Frances Fitzgerald MEP joined us to discuss her European Parliament report 'The gender perspective in the COVID-19 crisis and post-crisis period' with Prof Ursula Barry, Professor of Gender Studies at the Centre for Gender, Feminisms and Sexualities at UCD.

An artist's impression of the UCD Future Campus.

Research

Externally funded research awards registered during 2020/21 amounted to €131.9 million. Notable among these were a European Research Council Advanced Grant to Professor Kathleen James-Chakraborty, UCD School of Art History and Cultural Policy and UCD Humanities Institute, and second-phase funding for the iCRAG SFI Research Centre in Applied Geosciences, led by Professor Murray Hitzman, UCD School of Earth Sciences.

It is a very interesting time for research and innovation, as post-pandemic adjustments, geopolitical shifts and the impacts of climate change and of digitalisation present challenges and opportunities both globally and locally.

Campus Development

We are in the process of investing €1 billion in our Belfield campus. This will provide world-class facilities for students, faculty and staff. As with most on-campus activities across the University, COVID-19 had a significant impact on campus development and operation of the estate over the academic year 2020/21. Government imposed lockdowns resulted in building sites being closed for long periods of the year, impacting and resulting in delays to several projects.

Despite this, significant progress was made in the handover of the residential accommodation within Phase 1 of the Residential Masterplan this year. This provided an additional 924 en suite bedrooms for the start of the academic year 2021/22.

The Future Campus Masterplan presents a vision for the development of a significant portion of the Education, Research and Innovation Character Area adjacent to the main entrance of the Belfield Campus. The project involves the delivery of two new buildings, the Centre for Creativity and the Centre for Future Learning, as well as significant landscaping, commuting infrastructure and public realm improvements.

Significantly during the past year UCD secured all planning consents for the project and enabling works have commenced to clear and prepare the sites for the future buildings, relocating parking, changes to the road layouts and underground services, including a connection to the Belfield district heating system.

Global Engagement

UCD's international student recruitment engagement defied expectations in 2020, bolstered by strong regional engagement through our Global Centres in China, Malaysia, India, UAE and USA. UCD proved incredibly resilient in attracting international students with virtual engagement and digitised materials used to connect with prospective students.

The opening of two new joint international colleges in China was a significant achievement for UCD in transnational education. With these two new ventures, the Chang'an-Dublin International College for Transportation at Chang'an University (CDIC) in Xi'an and the Guangzhou-Dublin international College for Life Sciences and Technology at South China Agricultural University (GDIC) in Guangzhou, coupled with the Beijing-Dublin International College at Beijing University of Technology (BDIC) established in 2012, UCD is now unique internationally in operating three joint international colleges in China. This is testimony to UCD's standing as a truly Global University and our acknowledged expertise in transnational education.

Equality, Diversity and Inclusion

The pandemic has been challenging for everyone and those in the groups protected in legislation and under our policies on equality grounds are liable to have experienced particular difficulties. An inclusive and flexible approach has enabled our Schools and Units to support students and employees during this time. Strategy and policy reviews across the year, while ensuring currency, ensured that EDI policies contributed to the objectives of the University's strategy.

Belfield 50

Along with project sponsor, Professor Orla Feely, Vice-President for Research, Innovation and Impact, I launched the Belfield 50 programme in September. While some of the project's ambitious plans fell victim to the continuing pandemic, a range of online resources provided a fitting celebration of 50 years of UCD at the Belfield campus. This celebration for the generations of students, faculty and staff who breathed life into the campus over five decades tells the story of UCD's ambitious development of this wonderful campus; with a timeline exhibition, online and on display both inside and outside the lower ground floor of the main restaurant; a book – Making Belfield, published by UCD Press; a photographic exhibition Conveying Space by Daniel Holfeld; and a short film, Shaping Belfield.

Community Engagement

The COVID-19 pandemic has highlighted the hands-on approach of the UCD community in addressing real world problems, through community engaged research, teaching and volunteering. Throughout 2020/21, UCD in the Community continued to connect with community-based organisations, highlighting the engagement taking place around the University and beyond, connecting colleagues and students with the wider community and facilitating their annual flagship events.

Highlights in 2020/21 included the launch of the UCD Community Engagement Report 2019/20. The purpose of the report is to celebrate, highlight and record the many fantastic contributions of our colleagues, students and alumni, both outside and within the University. The report can be viewed on the UCD in the Community website.

Hope Fest, UCD's annual well-being event for those experiencing homelessness, was adapted and held virtually on World Homeless Day, 10 October 2020. Run in collaboration with Dublin Lions Club and Dublin Simon Community, this event provided over 350 people experiencing homelessness with hot food, wellness activities and a video with messages of hope and live music from high profile Irish musicians and our own UCD Choral Scholars.

The annual Dublin Simon Community care package appeal took place in December, in collaboration with Terenure Presentation Community College as part of their Localise youth volunteering programme. Thanks to the generosity of UCD faculty, staff and students over 300 vouchers for essential items and clothing were donated and distributed to rough sleepers across Dublin.

A new community engaged learning and teaching network (UCD CELT Network) was established to assist colleagues who are interested in supporting students and community organisations to learn from each other, while bridging the gap between academic learning and the lived realities of society, building on one of the core objectives of the UCD Rising to the Future Strategy 'continue to build our engagement locally, nationally and internationally'.

Major Strategic Partnerships

Major strategic partnerships continued to thrive in a year of unprecedented challenge, achieving significant successes. Nurturing current and prospective partnerships in Ireland and internationally, those relationships are crucial in enabling UCD to maximise our relevance and impact on society. UCD's position as Ireland's Number 1 in QS World University Graduate Employability Rankings reflects the fact that 'UCD is doing most to cultivate relationships with employers'.

Theresa O'Leary, UCD in the Community with students from Terenure Presentation Community College.
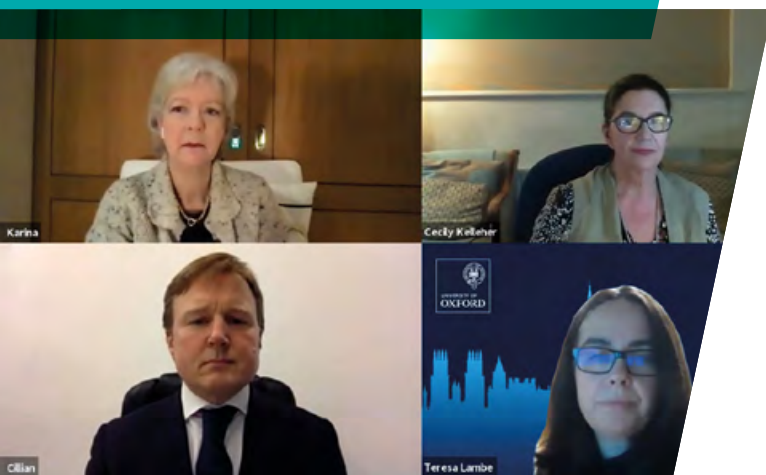
UCD In Conversation – 'UCD and the COVID-19 Vaccine' – we heard from Dr Cillian De Gascun, Prof Teresa Lambe, Prof Karina Butler and Prof Cecily Kelleher on leading in the fight against this deadly virus and making a significant impact in the fields of vaccine development and trials, laboratory testing, viral evolution and immunisation.

UCD's major strategic partnerships include: AIB, Bristol-Myers Squibb, Dún Laoghaire-Rathdown County Council, Genuity Science, ICON plc, Intel, Mainstream Renewable Power, Microsoft, Origin Enterprises plc, PwC, A&L Goodbody and Teagasc.

In September, I met with Dr Colin Hunt, AIB Group CEO and senior colleagues. Our longstanding partnership has included the establishment of the AIB Chair in Behavioural Economics and their support of UCD Energy Institute, NovaUCD and research collaboration in data analytics and cybersecurity.

The Human Capital Initiatives Pillar 3 Innovation and Agility Stream outcomes were announced in October. I was delighted UCD was awarded an estimated €23 million across six successful proposals, which was a result of significant collaboration between UCD, higher education institutions nationally, the IUA, the HEA and our strategic partners.

Minister Simon Harris TD joined Professor Colin Scott, Principal, UCD College of Social Sciences and Law; Caspar Klynge, Vice-President, Microsoft; and Cathriona Hallahan, MD Ireland, Microsoft to inaugurate Ireland's first Digital Policy Academic Programme. The programme includes certificate and masters courses to build public and private sector digital policy capability throughout the EU. Microsoft and UCD also collaborated to host a workshop, Digital Sovereignty and Digital Citizenship, with the keynote address by Dragos Tudorache, European Parliament Committee on Artificial Intelligence.

Eamonn Sinnott, General Manager, Intel Ireland and I led the fifth annual Intel-UCD Scholarship Awards Ceremony, awarding scholarships to 12 outstanding students. A sincere thank you to Intel for its substantial investment in the new UCD Centre for Creativity and support of the new UCD Explore Intel Laser Harp. Unveiled at the UCD Festival, this beautiful harp by artist Tom Freer, a synergy between science and the arts, is accessible to children regardless of ability.

I met with Philomena Poole, Chief Executive, Dún Laoghaire-Rathdown County Council in March and extended my thanks to

her for the continuous collaboration between UCD and DLRCC over many years and I took the opportunity to wish her well in her retirement.

I opened the inaugural Dublin Climate Dialogues, a landmark virtual global conference, based at UCD, exploring accelerating pathways to net-zero carbon emissions. Keynote speakers include: US Special Envoy John Kerry who joined national and international leaders from government, industry and academia. A sincere thank you to all involved, notably Dr Eddie O'Connor, event chairperson and Pat Cox, former president, European Parliament, for their vision, collaboration and partnership with UCD.

ICON and UCD entered a second phase of our partnership, with substantial support of UCD Future Campus and collaboration with the UCD College of Business, facilitating talent development within ICON.

The seven-year partnership between PwC and UCD continues, representing significant investment, enabling ongoing collaborations and support for the UCD Moore Centre for Business.

I met Professor Gerry Boyle, Director of Teagasc, reviewing the partnership between our organisations, wishing him well for his retirement. I look forward to working with his successor Professor Frank O'Mara.

The Consus Steering Group, including Professor Orla Feely and Sean Coyle, Group CEO, Origin Enterprises, met to review this collaborative partnership. Multidisciplinary UCD research teams, together with Origin, continue to address crop sustainability, a major global challenge.

In other partnership developments, Professor Liam Kennedy, UCD Clinton Institute and Donie O'Sullivan, CNN journalist and UCD alumnus, introduced the new MA in Journalism and International Affairs programme, accredited by UCD and jointly delivered with CNN Academy, offering direct collaboration with the news industry and best practices in multiplatform journalism and production.

Connecting with our Alumni Worldwide

The global network of UCD alumni continues to be one of the University's greatest strengths, and we now have over 297,000 alumni in 184 countries, with 47 global chapters.

Despite the difficulties posed by the ongoing pandemic, alumni engagement remained strong and exceeded our expectations. In 2020/21 our Alumni Relations team noted a 40% increase in event delivery, with engagement from over 50,000 alumni, supporters and friends worldwide, an increase of 9,000 over 2019/20. We have continued to see an increase in activity within our online communities, including the UCD Alumni Network and social media channels. This included a 66% increase in engagement on the UCD Alumni YouTube channel in 2020/21, where alumni and friends can view events they may have missed.

Event highlights for the year included the popular UCD: *In Conversation* series, which drew audiences from over 65 countries. The *What It Takes* series of career-building talks and presentations continued to hit the mark this year, and a new four-part series of

world in lively discussions focusing on topics of interest to our global UCD community and prospective students. Locations included Canada, Germany, UK, US, Australia, India, France and China.

Our Global Alumni Ambassador Programme, launched last year, has already connected almost 250 alumni ambassadors with incoming students. Our online Alumni Network continues to grow, with almost 10,500 members, and it is especially heartening to note that over 5,450 volunteers have supported our students and our UCD community. Our alumni volunteers enrich the experience of our students in many ways, giving generously of their energy and expertise to support those following in their footsteps. I thank all of our volunteers worldwide, who give so generously of their time, for their commitment, goodwill and support.

Philanthropic Giving

Philanthropic support for UCD remained strong during 2020/21 and I am deeply grateful for the ongoing generosity of our alumni, corporate partners and friends amidst the continued uncertainties of the pandemic. With their tremendous support and commitment, we were able to advance our work as an academic community and maintain our standards of excellence in education and research. Philanthropic giving supports an outstanding educational experience for our students. It provides critical resources for UCD to establish academic chairs, push the boundaries of research and innovation, and develop world-class infrastructure and facilities across our campuses.

Our alumni and friends have always been loyal and generous supporters of UCD students. Through annual giving, College Support Funds and other channels, they help us to provide equality of access and opportunity, and an exceptional educational experience for our students. In 2020/21, philanthropic giving enabled us to provide enhanced counselling services and financial supports for students struggling to cope with the emotional and economic fallout of the pandemic. Without the support of our donors, many students would be unable to overcome the barriers of disadvantage. By

finance workshops, *Money Talks,* featured financial experts sharing knowledge, insights and advice on savings, health insurance, mortgages and investments. *UCD Women in Leadership* drew the largest number of participants in its six-year history and included a day of mentoring circles to provide valuable face time with inspiring leaders from our alumni community. An online ceremony to mark the *UCD Alumni Awards 2020* celebrated the outstanding achievements of nine alumni who uphold the values that are embedded in the DNA of our University: integrity, excellence, collegiality, engagement, creativity and diversity. Most recently, we were proud to deliver a reimagined *Golden and Diamond Jubilee Reunion Celebration* online for the Classes of 1961 and 1971.

The newest edition of our alumni magazine, *UCD Connections,* launched in September 2021. With the theme of Building a Healthy World, one of our four strategic themes, this year's magazine included contributions on *The Healthy World Agenda* from 12 alumni and academics, including Dr Mike Ryan and Dr Tony Holohan. *UCD Connections* is a wonderful showcase of the strength and breadth of our alumni worldwide, with over 300 alumni featured in its pages. The magazine was distributed with the Irish Times and the Sunday Business Post, as well as by mail to key alumni worldwide.

In May 2021, the second UCD *Festival@Home* presented an ambitious programme of over 100 virtual events delivered by the UCD community, world-class academics, partners and high-profile alumni, including Neil Jordan, Shelly McNamara, Frank McDonald, Madeleine Keane, Kevin O'Sullivan, Olivia O'Leary, Derek Tynan and Jessica Traynor. The newly launched *Global Perspectives* series ran in the two weeks leading up to this year's Festival. This eight-episode programme featured UCD alumni, academics and friends around the

From the popular series: What it Takes… to Network like a Pro – Siobhán McKenna, Head of Equality, Diversity & Inclusion at the Public Appointments Service and Dr Martin Russell, Advisor at The Networking Institute offer practical tips to network more effectively.

Young, Black, Irish (l-r): Nana Nubi (alumna, lecturer and author), JYellowL (alumnus and musician), Aghogho Okpara (final year undergraduate student, writer and blogger) and Bashir Otukoya (PhD candidate and academic) joined us for a live, vibrant and insightful discussion exploring lived perspectives about life in Ireland for people from young, Black-Irish communities.

// I would also like to acknowledge the patience and adaptability of our students. Despite having a very different university experience from that which they were entitled to expect, our students have continued to engage positively and effectively continued their learning journeys //

receiving vital assistance when they need it, they are inspired and empowered to pursue their dreams and ambitions with courage and determination. I wish to thank our alumni and friends who have continued to support our students since the onset of the pandemic.

Philanthropy also provides critical funding for UCD's pioneering research programmes, and I extend my thanks to all those who supported the UCD Breakthrough Research Fund in 2020/21. This fund was established to meet the urgent needs of our researchers as they applied their expertise to tackle the diverse and complex challenges that arose during the pandemic, from understanding and treating COVID-19 to developing new models of business to support Ireland's economic recovery. The Breakthrough Research Fund will continue to be an important channel for philanthropic giving to support transformative research at UCD. It will ensure that our researchers can access the resources they need to respond rapidly to emerging challenges and opportunities in the future.

The generosity of our supporters is evident across campus, in our superb sports facilities, excellent academic programmes and modern buildings designed for 21st-century education and research. Philanthropy continues to be a vital enabler of our ambitious campus development plans. Thanks to the sustained generosity and

vision of philanthropic donors, we are making significant progress towards completing the transformation of UCD College of Science into a world-leading centre of excellence for science education and research. We are also advancing the visionary Future Campus project and have commenced landscaping and enabling works for the Centre for Creativity and Centre for Future Learning.

In Conclusion

I would like to reiterate my thanks to the members of our University community for the tremendous effort throughout the pandemic, ensuring that our students could continue their learning journeys, our research has continued and in some cases intensified, our engagement with our alumni, key stakeholders and national and international communities has grown, capital projects and maintenance have continued, and overall the show has been kept on the road. We are well placed to leverage the lessons learned during the pandemic, including alternate ways of working and teaching, while embracing with new vigour those activities where face-to-face interaction is invaluable, emerging from this challenging time stronger than ever.

I would also like to acknowledge the patience and adaptability of our students. Despite having a very different university experience from that which they were entitled to expect, our students have continued to engage positively and effectively continued their learning journeys. They are a credit to themselves and to UCD.

I look forward, with the support of the University community, to continuing to rise to the challenges ahead, growing our University and its reputation, nationally and globally.

Professor Andrew J Deeks,
UCD President

UNIVERSITY RESPONSE TO COVID-19

Throughout this Report, you will read about the comprehensive response to the continuing COVID-19 pandemic from across the University. It impacted each and every aspect of how we did business during the past year.

A number of University committees managed the significant impact of the pandemic across campus:

UCD COVID-19 Consultative Committee

This year UCD continued to manage the risks that the pandemic has posed for faculty, staff and students. A particular challenge has been the cycle of planning for the return to campus of our students in September 2021 for full face-to-face teaching, one that has required significant efforts from all in UCD, especially from UCD Safety Insurance, Operational Risk Office (SIRC) and UCD Estates.

To plan for a return to campus and to provide a forum for the UCD committee to consider the response, the COVID Consultative Committee, established in 2020 and chaired by Professor Aoife Ahern, Principal, UCD College of Engineering and Architecture, with support from Dr Peter Coulahan, Director of SIRC and Dr PJ Barron, Director of UCD Estates, has continued to meet. The committee includes representation from faculty, staff and students, considers the impact of COVID-19 on the UCD community and discusses the policies required to ensure everyone's safety. The committee works with UCD SIRC and UCD Estates to bring forward matters of concern from the UCD community and to discuss appropriate responses.

The team at UCD SIRC has responded admirably to the continually changing landscape and has implemented policies and frameworks to support UCD in activities related to teaching, research and administration. While some staff are still working from home, many in UCD are now back on campus and have been for some time, which has required SIRC to give guidance and advice on what is safe to do and what behaviours are appropriate.

The team at UCD Estates has continued to ensure that appropriate safety equipment and PPE are in place across UCD and that students living in residences away from home at a difficult time are supported and safe. A very important role played by UCD

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Estates this year has been the preparation of classrooms, lecture theatres and laboratories for the presence of large groups of students for the first time since March 2020.

To prepare for this, UCD Estates has carried out audits of ventilation in all teaching spaces and has continually monitored air quality in teaching spaces throughout the year.

The Consultative Committee will continue to meet for the foreseeable future, as we continue to deal with the continuing challenges posed by the pandemic. It has provided a valuable forum for discussion and feedback to senior management on policy and responses to the pandemic and is vitally important in allowing a safe return to campus.

Reopening Campus Services and Facilities Working Group

This group was chaired by Professor Jason Last, UCD Dean of Students and co-chaired by Dr PJ Barron, Director of Estate Services, and managed by Maeve O'Connell. It was originally established in June 2020 to allow the then monitoring group to evolve into a group that could collectively advise on preparations necessary for students to return to campus safely. Through the 2020/21 academic year, with students learning remotely, attending essential campus-based education and living on-campus, the group was able to flex and respond to the changing pandemic and published guides for students in advance of each trimester.

Coordinating COVID-19 Samples and Clinical Data

The National Irish COVID-19 Biobank (NICB) is an essential component of Ireland's response to the pandemic. Established by the Health Research Board at the request of the Department of Health, the NICB will ensure that COVID-19 samples and associated clinical data are collected in a coordinated and harmonised manner, and that researchers can access this material using a mechanism that complies with safety, quality and other international best practices and standards. This will allow more opportunity for research and innovation to increase our understanding of COVID-19, inform new treatment and management strategies, improve health outcomes and better prepare us for future emergencies.

The NICB has dual objectives of integrating future collection of COVID-19 samples and data and making them accessible for

research and maximising the integration of existing collections of COVID-19 samples and data. All samples and associated data within the NICB will be consented for research. It will be overseen by a Governance Board, and decisions taken on access will be published online to ensure transparency. Crucially, the NICB aims to strike the balance between research with the potential to improve the health of many, while protecting the rights, dignity and agency of individual research participants, as well as building and maintaining public trust.

Jointly led by Professor Patrick Mallon, UCD School of Medicine and fellow Infectious Diseases Consultant, Professor Colm Bergin, St James's Hospital, Dublin, the project is a collaboration across six academic institutions and 13 hospitals, spanning adult, paediatric, maternity and community clinical services.
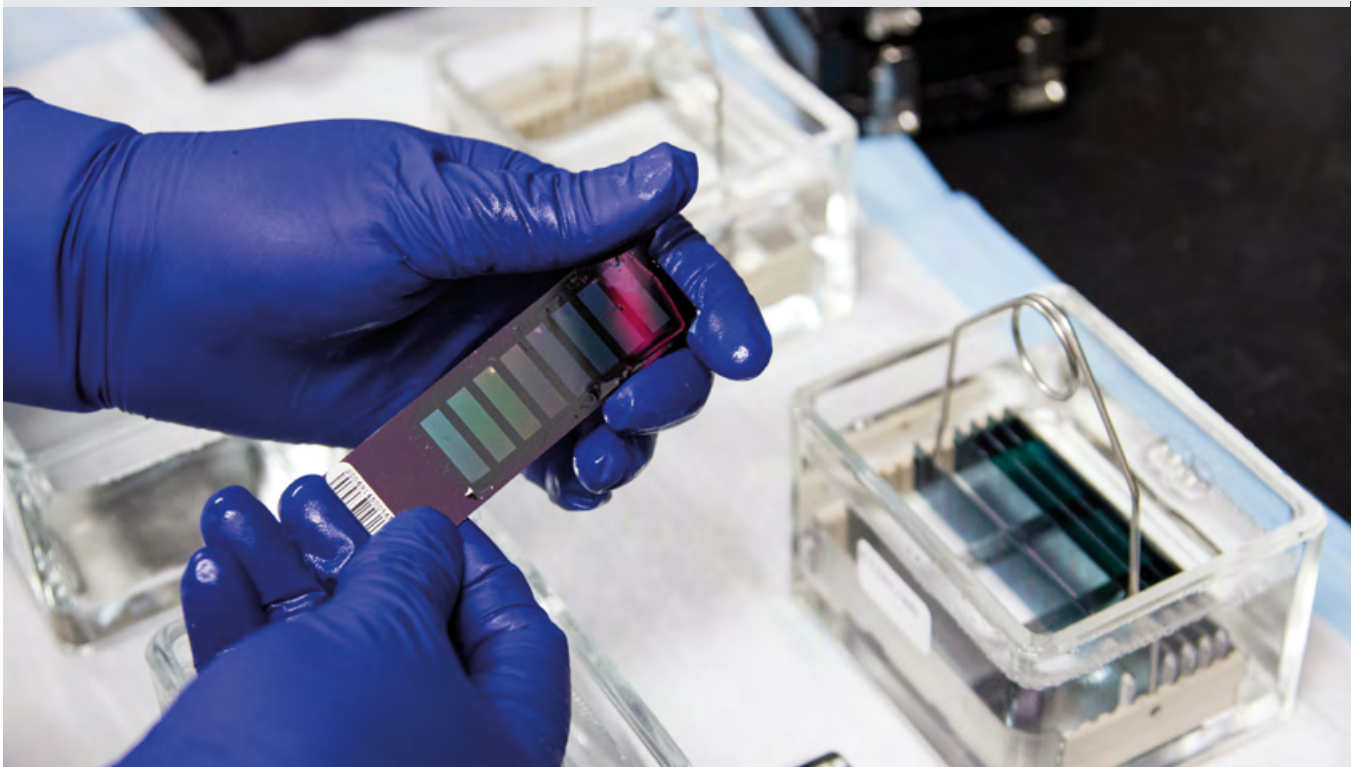
In addition, a comprehensive set of Frequently Asked Questions was maintained and regularly updated, allowing faculty, staff and students to keep up to date with the ever-changing nature of regulations, procedures and protocols. The landing page for these FAQs was redesigned over the summer, including a comprehensive A-Z facility for ease of access to the most up to date information. Faculty, students and staff could access the list of services, facilities and supports that remained available on campus, which were available remotely and, in many cases, available through both routes.

The group was also a mechanism for teams to share their concerns and innovations in response to the need to pivot their supports and services, and provided an opportunity for cross-institutional support between teams with a particular emphasis on continued accessibility for students whilst maintaining a safe environment for the multitude of staff involved.

// A comprehensive set of Frequently Asked Questions was maintained and regularly updated, allowing faculty, staff and students to keep up to date with the ever-changing nature of regulations, procedures and protocols //

Tracking COVID-19 infections through wastewater on the island of Ireland

People infected with COVID-19 shed the virus in their faeces and it can be detected in sewage entering wastewater treatment plants. Science Foundation Ireland has previously funded research to develop technology to monitor the virus in sewage treatment plants in Dublin. Now SFI and the Northern Ireland Department of Agriculture, Environment and Rural Affairs (DAERA) are supporting a project to use the technology to detect the virus in sewage in Northern Ireland. This will allow researchers to assess and report the real infection rate for the island of Ireland and to identify hotspots where an outbreak is happening.

Lead researcher Professor Wim Meijer, UCD School of Biomolecular and Biomedical Science, co-applicant Professor John McGrath, Queen's University Belfast and their cross-institutional team will transfer the technology to Northern Ireland so that data on the amount of virus in sewage will be available there as well. This, together with data from known cases of COVID-19 and statistical models, will assess the real infection rate on the island of Ireland and identify emerging areas or hotspots of infection. The project will tell us what the real infection rate is on the island of Ireland and enable early intervention if a local outbreak is occurring.

UCD is National Coordinator on VACCELERATE Programme

The European Commission has launched a new EU vaccine clinical network to accelerate the trialling of COVID-19 vaccines. VACCELERATE, the European Corona Vaccine Trial Accelerator Platform, will be the pan-European backbone accelerating Phase 2 and 3 COVID-19 vaccine trials, connecting all stakeholders involved in vaccine development and providing a platform for clinical trial design and conduct. The network constitutes a rapid response single entry point for all stakeholders from public health authorities to vaccine developers, to address respective needs and kick-start Phase 2 and 3 vaccine trials.

There are 21 countries involved in the network including Ireland. Irish partners are UCD and NUIG, led from UCD by Professor Patrick Mallon, Director, UCD Centre for Experimental Pathogen Host Research (CEPHR) and UCD School of Medicine.

VACCELERATE will allow capacity mapping of clinical trial and laboratory sites across Europe, to identify suitable sites for individual Phase 2 and 3 vaccine trials. In addition to providing access to laboratories and a standardised set of assays essential for clinical Phase 2 and 3 trials, the network will also build capacity and increase quality across the bloc via shared best practice and training, while volunteer registries will facilitate patient recruitment.

Internal Contact Tracing Group

An internal contact tracing team was formed to monitor and respond to COVID-19 cases on campus, led by Professor Jason Last and Dr Peter Coulahan, and met on 38 occasions in the last academic year.

Throughout the pandemic, faculty, staff and students were asked to let the University know if they become COVID positive by using a 24-hour line. This, together with information provided by HSE contact tracing teams, enabled the UCD SIRC team together with Estates Services to monitor the spread of the virus within the University community and to signpost individuals to external and internal supports.

A COVID-19 nurse was appointed to help assess the support needs for students who had to restrict their movements to campus residences and to support other institutional responses including Rapid Antigen Testing. An internal contact tracing support was also

// A COVID-19 nurse was appointed to help assess the support needs for students who had to restrict their movements to campus residences and to support other institutional responses including Rapid Antigen Testing. An internal contact tracing support was also appointed who followed up as necessary //

appointed who followed up as necessary with those reporting COVID-19 to ensure that their known contacts on campus or in association with University activities had been relayed to the HSE and to enable any further interventions to limit contagion such as communication to cohorts who were potentially impacted and deep cleaning of facilities.

The group also coordinated correspondence with the HSE regarding any potential clusters or outbreaks and helped put in place additional testing activities with the HSE as necessary.

UniCoV – Safeguarding our Campuses

UCD joins NUIG, TCD and UCC in this clinical study to explore effective rapid testing and surveillance systems on college and university campuses, to enable the early identification of asymptomatic COVID-19, which will assist with the safe and sustainable reopening of campuses and society more broadly.

UniCoV will further develop and apply testing, screening and surveillance strategies to assist with early warning systems for disease, in the context of COVID-19 infection in Ireland. Involving students, faculty and staff, the study explores the feasibility and acceptability of self-reporting, self-testing and biosamples surveillance systems. Findings will inform the development of early warning systems and expedite future outbreak prevention and control.

Testing at the National Virus Reference Laboratory

During the second half of 2020, it became apparent that there would be a need for additional SARS-CoV-2 testing capacity within the public sector. Thanks to the Department of Agriculture, Food, and the Marine, the National Virus Reference Laboratory (NVRL), with support from the HSE, was able to secure access to laboratory space at the Backweston Laboratory Campus in Celbridge. The NVRL Satellite Laboratory at Backweston went live on 4 January and is the largest public laboratory performing SARS-CoV-2 testing, employing 55 staff, working 7 days a week in two teams, with a current capacity of 4,000 tests per day.

Working with the Health Protection Surveillance Centre (HPSC), the NVRL was selected as the lead laboratory partner for the National SARS-CoV-2 whole genome sequencing surveillance programme, building in-house sequencing capacity with the aid of the HSE, to between 1,200 and 1,500 sequences per week. The NVRL is also the lead laboratory partner for the HSE-funded National Sero-Epidemiology Unit, which is operated by the HPSC.

HSE Vaccination Centre at UCD O'Reilly Hall

UCD College of Health and Agricultural Sciences and UCD Health Affairs, working together with the Ireland East Hospital Group, facilitated the opening of a HSE vaccination centre at UCD O'Reilly Hall. In May 2021, a property agreement was drawn up with UCD Legal Affairs and SIRC and following agreement and approval from all sides, the vaccination centre in O'Reilly Hall opened its door on 4 June with the support of UCD Estates and the UCD Dean of Students, Professor Jason Last.

In its four months of operation, there were 9,000 vaccinations per week, totalling 127,000 in the period. The centre was staffed by clinical teams, volunteers, the Defence Forces and administrators, including UCD students and staff members. The Vaccination Centre has proven a lifeforce for O'Reilly Hall. It was instrumental in increasing footfall to the Café, raising awareness of the facilities in both O'Reilly Hall and the University Club and engendered a strong feeling of pride among the UCD community.

FoodShield: Helping Ireland's AgriFood sector to bounce back

Ireland's agricultural and food sector is key to our economy, including our exports. COVID-19 and Brexit pose major challenges to validating the safety and quality of food and animal feed, and this could have a major impact on Ireland's ability to provide evidence to meet EU requirements. The FoodShield project, supported by Science Foundation Ireland and the Northern Ireland Department of Agriculture, Environment and Rural Affairs (DAERA), will help the Irish AgriFood sector recover from delays and negative impacts associated with COVID-19 and assess their potential benefits at an all-island level.

Lead Researcher Professor Fiona Doohan, UCD School of Biology and Environmental Science, with co-applicant Professor Chris Elliott, Queen's University Belfast and a cross-functional team will develop prototype digital technologies, underpinned by economic analysis and potential policy interventions, to help the Irish AgriFood sector to reduce delays and support Irish plant protein products using ubiquitous sensing, track and trace, food provenance and the Internet of Things (IoT).

FoodShield will help to build the robustness, agility and transparency of our food systems and so support them as they bounce back from COVID-19 and capitalise on new opportunities.

Inoculating against COVID-19 Misinformation

COVID-19 has been accompanied by a wave of misinformation that can undermine public health guidance and may even compromise public safety. When people are isolated and rely on social media as a source for news, misinformation can easily spread. In turn, unreliable information can affect how people behave and may even increase their risk of becoming infected with COVID-19.

A project, supported by the Health Research Board and the Irish Research Council, looks at how people respond to misinformation about COVID-19 and explores a range of interventions to reduce its spread. Lead researcher Dr Ciara Greene, UCD School of Psychology with project collaborator, Dr Gillian Murphy, School of Applied Psychology, UCC examines why people accept misinformation about COVID-19 and look at the effectiveness of cognitive interventions to reduce its spread.

Understanding why people believe in, share or act on misinformation is critical to slowing its spread. The interventions developed will give people the tools to evaluate information and become more critical consumers of news media. In doing so, the project will empower citizens to protect themselves and their families from public health threats. By identifying ways to stop the spread and impact of misinformation about COVID-19, the research will help to support public health guidance.

UCD Contact Tracing Centre

The UCD Contact Tracing Centre, established in March 2020, was the first satellite CTC of the National Contact Management Programme and continued to operate throughout 2020 and into 2021. The alacrity with which it was established is a tribute to the UCD President, University Management Team, UCD Estates, Colleges of Science, Health and Agricultural Sciences and the School of Public Health, Physiotherapy and Sports Science from which the leadership, expertise and motivation emanated. The Centre operated for seventeen months, and some 240 volunteers contributed to its smooth running. In August 2021 a closing ceremony was held to acknowledge the contribution of all involved. The UCD CTC represented the best of strategic partnership between the University and health agencies of the State in the public interest.

Managing COVID-19 related risk within the UCD Veterinary Hospital

The UCD Veterinary Hospital is a critical teaching resource for the UCD School of Veterinary Medicine, both for final year undergraduate students and clinical postgraduate students as well as providing clinical care. The undergraduate students move through a series of clinical rotations within (or associated with) the Veterinary Hospital during their final year.

The mitigation of any COVID-19 related risk within the hospital has proved very challenging at each phase of the pandemic. With this in mind, a range of mitigation measures were developed and introduced, including the use of rapid antigen diagnostic testing (RADT). RADT offers a means to identify asymptomatic individuals, with the potential to substantially reduce the potential for introduction of SARS-CoV-2 into the hospital environment.

Serial antigen testing was initially used between April and June 2021. It was then restarted in late July 2021 and has run continuously since then, with approximately 2,200 tests carried out in that time. Tests are offered to faculty, staff and students in the hospital every Monday and Thursday. Participation is completely voluntary, and no pressure is applied to anyone to attend. Testing is carried out in a monitored, self-administered way. All testing and the protocols around testing and reporting are carried out with the informed consent of users and have been approved by the UCD human research ethics committee.

A survey conducted among faculty, staff and students showed an overwhelming majority reported satisfaction with the testing, reporting that they were happy to have it in place and many commented that it provided reassurance that correct measures were being taken to reduce risk in their work environment.

// Serial antigen testing was initially used between April and June 2021. It was then restarted in late July 2021 and has run continuously since then, with approximately 2,200 tests carried out in that time //

Healthy UCD

The Healthy UCD Steering Committee has cross-campus membership, chaired by Professor Patricia Fitzpatrick, UCD School of Public Health, Physiotherapy and Sports Science. The team comprises Brian Mullins, UCD Director of Sport and Maria Heffernan, UCD School of Public Health, Physiotherapy and Sports Science. Healthy UCD continued its work in a largely virtual format in 2020/21.

Graded experiential learning opportunities continued in 2020/21 for MSc Clinical Nutrition and Dietetics students and BSc Sport and Exercise Management students. They were supported in delivering Healthy Eating Week and the Well-being Your Way events online, making use of innovative formats including recipe videos, infographics and live online classes.

Healthy UCD and UCD Student Services developed UCD100, a virtual challenge for students to walk 100km in 30 days. Over 1,200 students registered, with over €23,000 raised for UCD St Vincent de Paul.

For faculty and staff, a variety of activities were organised with UCD Culture and Engagement, including a series of nutrition webinars, the UCD Challenge and Better Together Challenge to encourage increased physical activity, and live online fitness classes.

Global study shows significantly improved survival rates in patients treated with Tocilizumab

A study of 2,000 critically ill COVID-19 patients in 260 hospitals across the world has shown that treatment with the immune modulator, Tocilizumab, was 99% more likely to reduce deaths and time spent in intensive care, compared to patients who did not receive the treatment.

The findings, published in NEJM (the most widely read, cited and influential general medical periodical in the world), come from the REMAP-CAP trial, led in Ireland by Professor Alistair Nichol, St Vincent's University Hospital and UCD School of Medicine and globally by Imperial College London, Intensive Care National Audit & Research Centre (ICNARC) in the UK, and Utrecht University in Europe.

The findings show that a single course of treatment with this immune modulating drug can significantly improve outcomes for the most critically ill COVID-19 patients receiving organ support in intensive care units. However, the trial does not yet know the relative benefits of Tocilizumab compared to the other immune modulators. Further data are expected in the coming months.

Understanding and Preventing Outbreaks of COVID-19 in Meat Processing Plants

Outbreaks of COVID-19 in meat plants in Ireland have occurred during the pandemic, presenting threats to workers there and to wider society. A new project led by UCD and funded by Science Foundation Ireland will bring together a range of scientists from disciplines across a number of institutions to better understand exactly why meat plants are vulnerable to the transmission of COVID-19, and how to decrease the risks. The findings will protect us from this and similar threats in the future.

Lead Researcher Professor Grace Mulcahy, UCD School of Veterinary Medicine, Professor Séamus Fanning, UCD School of Public Health, Physiotherapy and Sports Science and their team will analyse the virus in meat factories through diagnostic test results and changes in virus genetic sequence. The research will also explore the factory environment, including temperature, humidity and airflows throughout plants and test an early-warning system that monitors waste streams.

Understanding how the virus spreads through meat plants and finding ways to anticipate outbreaks will help to protect meat plant workers from infection and thereby reduce the risk of the virus being spread beyond meat plants.

The project team has been working with the Department of Agriculture, Food and Marine to support the roll-out of rapid antigen detection tests (RADT) to the sector, by providing education and training to COVID officers and QC leads in plants. Preliminary results are encouraging in relation to the use of cartridges from positive tests for whole virus genomic sequencing, thus enabling within-plant molecular epidemiology, and enhanced detection of viral variants. Modelling, recording and cost-benefit analysis of the results of in-plant RADT will be a key output from the project.

UCD BY NUMBERS

Student Statistics Ireland Campuses

	2016/17	2017/18	2018/19	2019/20	2020/2021
Total	28,777	29,126	29,301	29,560	30,713
Undergraduate	17,054	17,169	16,998	17,119	17,749
Graduate Taught	7,017	7,079	7,463	7,633	9,138
Occasional UG	2,569	2,649	2,658	2,529	871
PhD	1,536	1,571	1,611	1,666	1,841
Occasional GT	395	459	403	446	927
Masters Research	206	199	168	167	187

Total   Undergraduate   Graduate Taught   Occasional UG   PhD   Occasional GT   Masters Research

Student Statistics Overseas Operations

	2016/17	2017/18	2018/19	2019/20	2020/21
Total	4,943	4,847	3,984	3,761	4,573

2016/17
Singapore: 2,690
Sri Lanka: 1,046
Hong Kong: 230
Spain: 22
China: 938
UCD Malaysia: 17

2017/18
Singapore: 2,439
Sri Lanka: 1,117
Hong Kong: 228
China: 1,063

2018/19
Singapore: 2,030
Sri Lanka: 486
Hong Kong: 179
China: 1,289

2019/20
Singapore: 1,765
Sri Lanka: 379
Hong Kong: 80
China: 1,537

2020/21
Singapore: 1,870
Sri Lanka: 436
Hong Kong: 123
China: 2,144

Students in Ireland

	2016/17	2017/18	2018/19	2019/20	2020/21
Total	28,777	29,126	29,301	29,560	30,713
Unknown	7	11	8	122	111
International	7,789	7,923	8,428	8,574	7,239
Irish	20,981	21,192	20,865	20,864	23,363

Legend: ■ Irish   ■ International

Undergraduate/Graduate Breakdown

Students 2020/21

39%
12,093: Graduate

61%
18,620: Undergraduate

Female/male Breakdown

98: Not stated

Students 2020/21

57%
17,493: Female

43%
13,122: Male

23: Not stated

Staff 2020/21

54%
2,124: Female

46%
1,753: Male
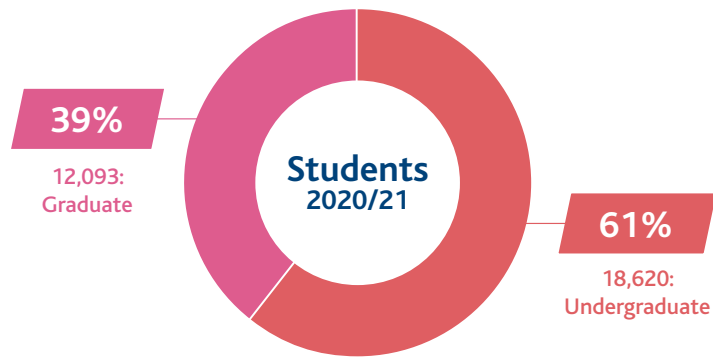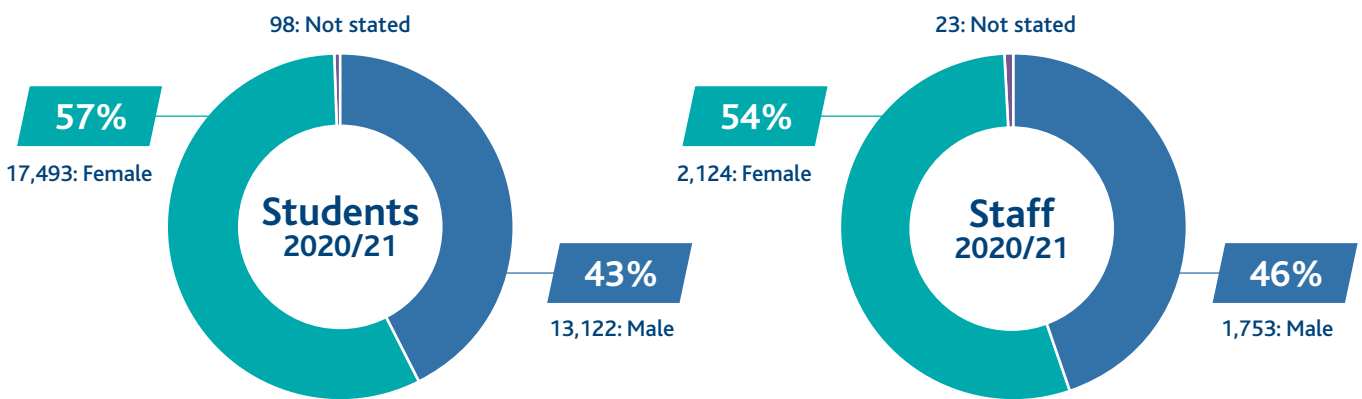
Staff Statistics in Ireland

Year	Irish	International	Not stated	Total
2017	2,443	929		3,372
2018	2,483	1,042		3,525
2019	2,485	1,086	53	3,623
2020	2,513	1,219	49	3,781
2021	2,569	1,286	45	3,900

■ Irish   ■ International   ■ Not stated
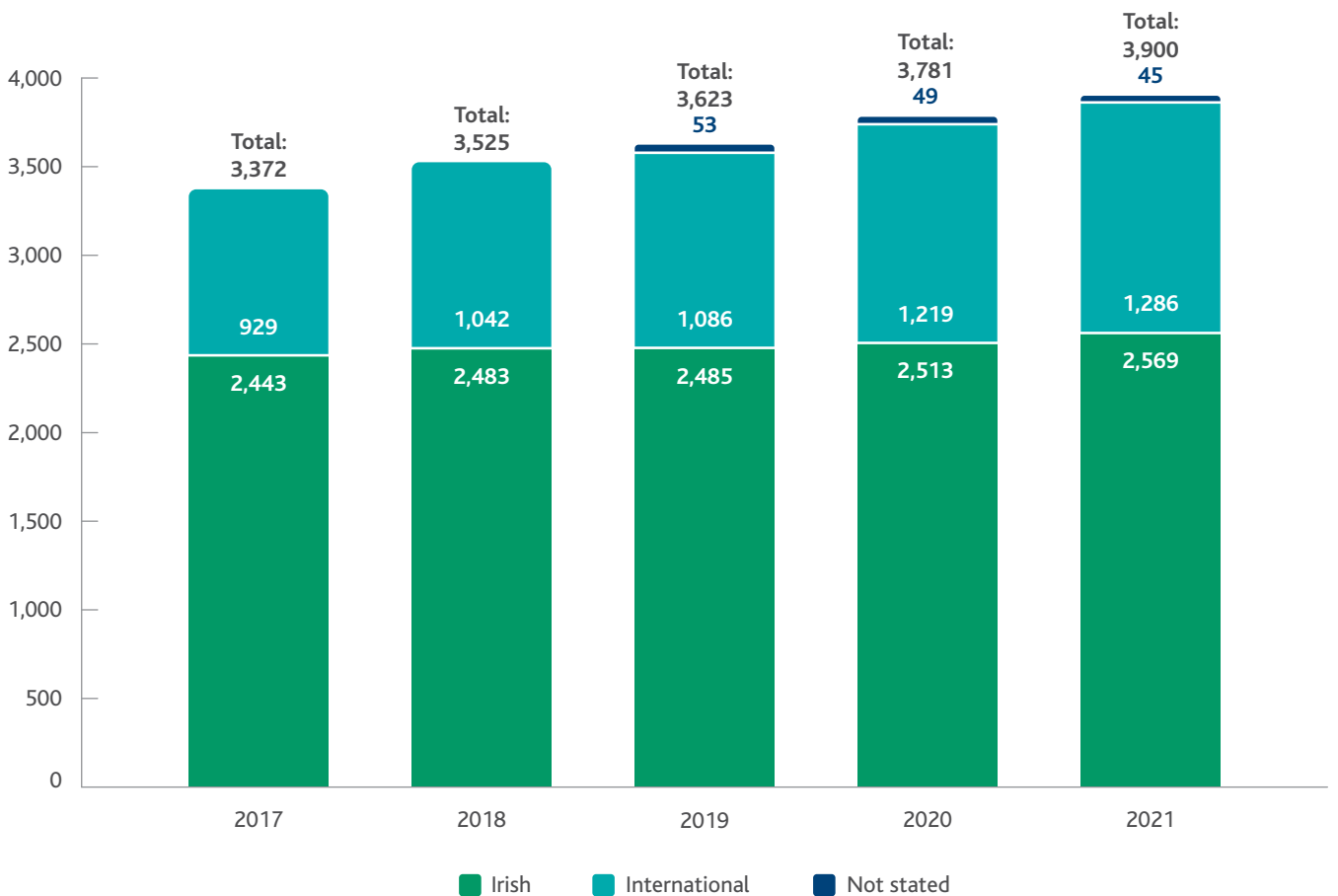
International Students by Region 2020/21

1,187 North America

1,978 EU

212 Europe

387 Great Britain

243 Northern Ireland

2,691 Asia

366 Africa

128 South America

47 Oceania

139 countries represented
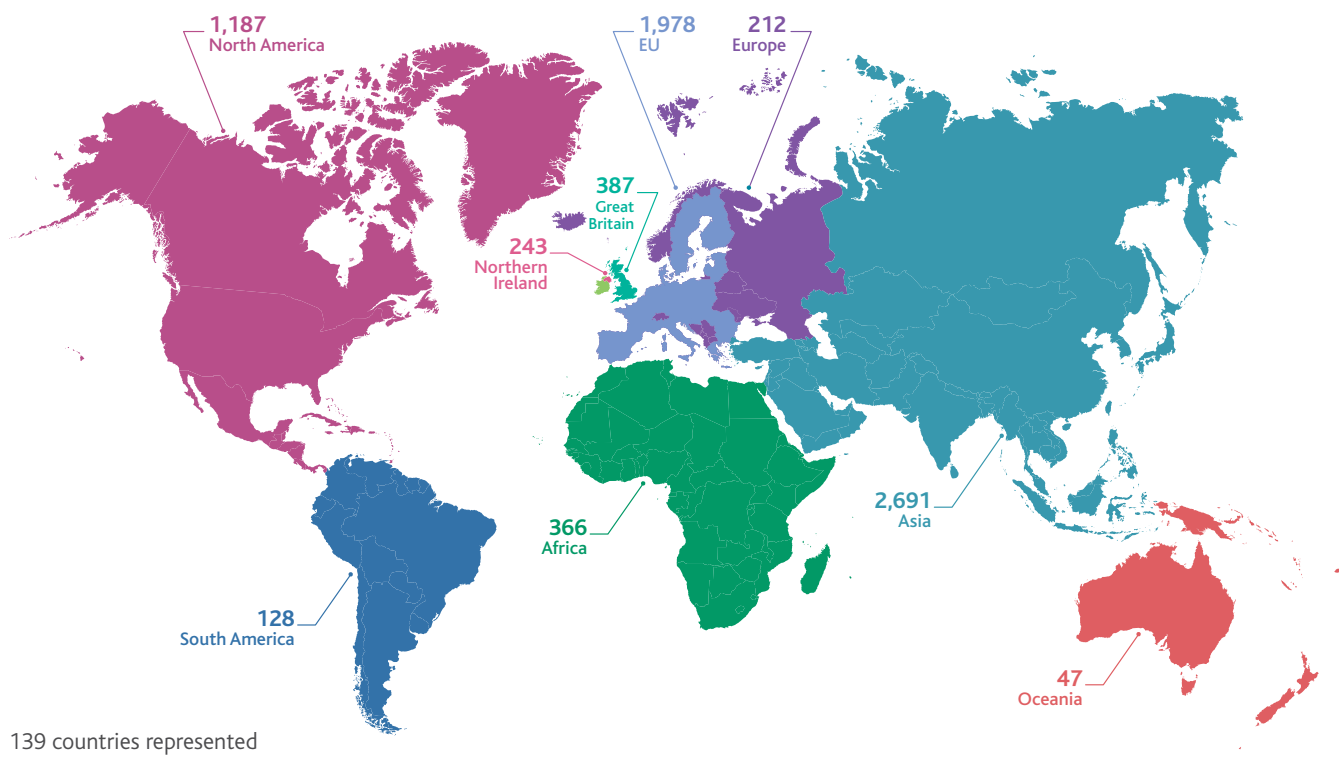
Undergraduate and Graduate Numbers by Discipline Ireland 2020/21

	Undergraduate	Graduate	Total
Generic programmes and qualifications	298	1,458	1,756
Education	27	444	471
Arts and humanities	2,589	1,176	3,765
Social sciences, journalism and information	2,110	2,954	5,064
Business, administration and law	3,413	1,099	4,512
Natural sciences, mathematics and statistics	2,313	701	3,014
Information and Communication Technologies (ICTs)	610	1,195	1,805
Engineering, manufacturing and construction	1,607	520	2,127
Agriculture, forestry, fisheries and veterinary	1,739	2,524	4,263
Health and welfare	3,781	22	3,803
Services*	133	–	133
Grand total	**18,620**	**12,093**	**30,713**

Figures are classified under the International Standard Classification of Education (ISCED) as used by the Higher Education Authority (HEA) and more widely to facilitate comparison of education statistics across countries on the basis of uniform and internationally agreed definition.
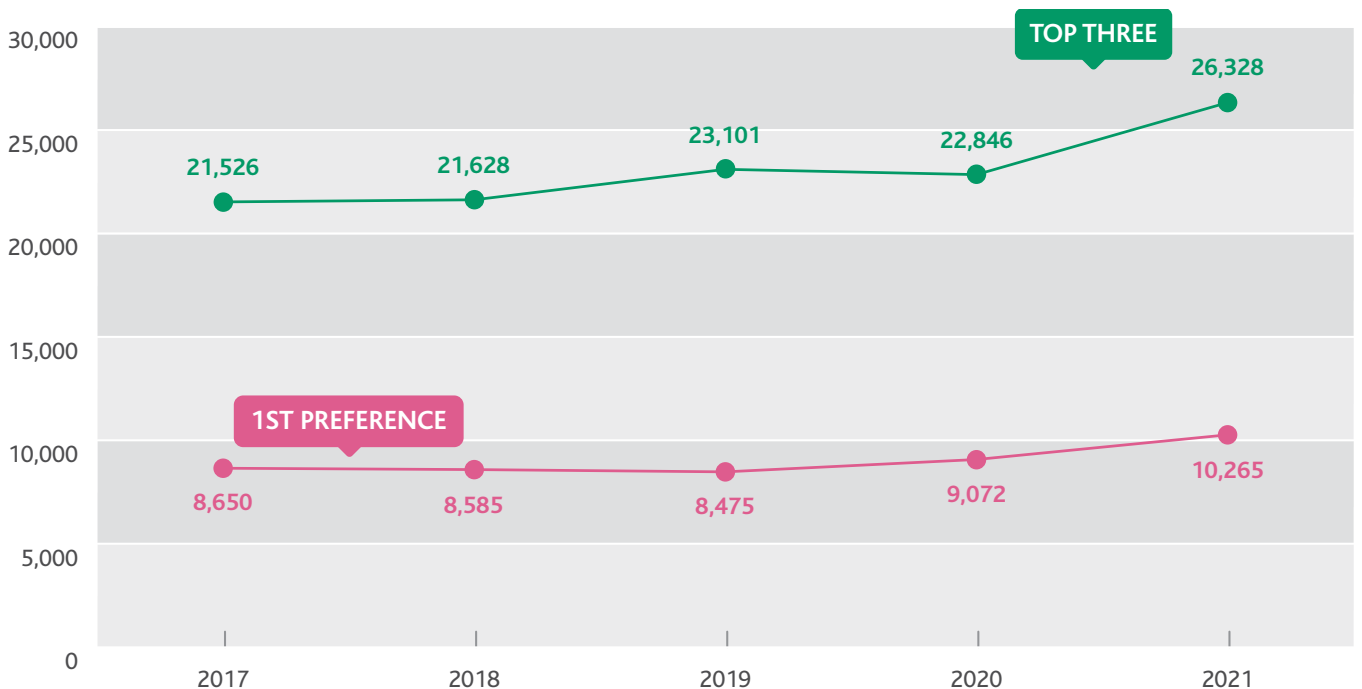
* Services include programmes such as Safety and Health at Work.

Top 20 Countries UCD Alumni*

212,884
(1) Republic of Ireland

15,112
(2) United States

13,676
(3) Singapore

10,937
(4) United Kingdom
(England, Scotland, Wales, Northern Ireland)

6,627
(5) Sri Lanka

4,652
(6) China

3,237
(7) Hong Kong

3,140
(8) France

3,125
(9) Germany

2,482
(10) India

2,321
(11) Australia

2,204
(12) Spain

2,101
(13) Canada

1,424
(13) Italy

1,011
(15) Malaysia

948
(16) Belgium

897
(17) Netherlands

690
(18) Switzerland

475
(19) United Arab Emirates

419
(20) Austria

* Alumni for whom we hold contact details

CAO 1st Preferences

TOP THREE

Year	2017	2018	2019	2020	2021
Top Three	21,526	21,628	23,101	22,846	26,328
1st Preference	8,650	8,585	8,475	9,072	10,265

1ST PREFERENCE

EDUCATION AND STUDENT EXPERIENCE

Introduction by the Registrar and Deputy President

A unique year for UCD, with challenges overcome through innovation, collaboration and creativity. Under the most unique circumstances, we have innovated, created new ways of working and demonstrated again our capacity to overcome difficulty and work together to deliver our courses and support our students. We have learnt a lot about ourselves, our resilience and our determination and capacity to deliver under difficult circumstances.

Introduction

When we reflect on our education provision and student experience during the academic year 2020/21 and the challenges posed by the pandemic for everyone both personally and professionally, we can be truly proud of our achievements. We delivered an educational experience for our students that allowed them to progress in their studies and graduate with their degrees at a time when many sectors were unable to provide a service. We used government funding to support students in many ways and we continued to deliver our services, plan for the academic year, and welcome our new students to UCD. In addition, we worked consistently to develop new initiatives and our students, faculty and staff developed new skills to work in an ever-changing and uncertain context. Timetabling and scheduling of classes was both a complex and challenging task in the context of changing public health guidelines and government decisions. Despite a disrupted Leaving Certificate experience, a new approach to calculated grades and uncertainty in relation to returning to campus, we witnessed a 16% increase in CAO first preferences and points for all UCD degrees. We worked successfully with the Higher Education Authority (HEA) to provide additional places to meet demand and we witnessed a significant increase in taught graduate recruitment. Our numbers of EU applicants doubled, and they were provided with excellent supports through the application process.

Planning Operations for 2020/21

The initial phase of COVID-19 and the lessons learned from that experience necessitated adopting new approaches in providing our services to students and faculty. We continued to integrate central services and support colleagues working in a distributed working environment. Through the Remote Working Group and through the Campus Reopening Group, staff from across the campus from College and School offices, UCD Registry, UCD Estate Services, UCD Access and Lifelong Learning, UCD Global, UCD IT Services and UCD HR came together to provide streamlined approaches to our services. We upgraded the University's core network infrastructure to develop more resilient, secure and scalable high-speed networks across the University and to future-proof our IT network for capacity growth and high-speed demands. We also introduced IT system enhancements to assist in streamlining international student recruitment, to enable improved targeting of recruitment efforts, as well as additional automation of communication.

In planning for the academic year 2020/21 we were conscious of the needs of our progressing students and our incoming students, and our activities reflected that reality. Our Administrative Services delivered a seamless registration experience for over 33,000 students resulting in high levels of student satisfaction.

// We continued our student recruitment activities with our first UCD Undergraduate Virtual Open Day which resulted in a 230% increase in engagement compared to the previous year //

Orientation and Open Days

Orientation 2020 required a complete redesign to deliver the traditional welcome in a new format. Working in partnership with the central orientation team, faculty, UCDSU and support units, a new online website and a virtual module was created to provide students with information, a virtual President's Welcome and interactive digital resources. The virtual module included information on IT Support, University for All, Academic Integrity, UCD Global and Study Supports. A key component was the Active Bystander Programme 'UCD says No to Sexual Misconduct', which is designed to promote a culture of zero tolerance to bullying, sexual violence and sexual harassment. Some six thousand students visited the content. Embedded surveys and quizzes allowed for the capture of feedback. The Active Bystander survey was completed by over 3,000 students in 2020. In qualitative responses, many students said they found the content very informative and useful as they embarked on their university journey. Graduate research student online orientation events were run in September 2020 and February 2021. This was the first year that a university-wide orientation was provided for graduate research students enrolling in September and January. Engagement with these events was high with approximately 400 registered for the event. An online Brightspace module was made available for those who could not attend or for students who wanted to re-visit the induction session at a later stage.

We continued our student recruitment activities with our first UCD Undergraduate Virtual Open Day which resulted in a 230% increase in engagement compared to the previous year. The success of the Open Day can be attributed to the collaborative efforts of UCD Student Recruitment and the wider UCD Community. The 2021 UCD Virtual Graduate Open Day allowed UCD to showcase the breadth of postgraduate programmes on offer.

Financial Support

UCD received €777,018 from the HEA to support students during COVID-19. UCD Access and Lifelong Learning (ALL) facilitated the HEA ICT COVID-19 Laptop Loan Scheme and distributed almost 500 laptops to eligible UCD students. Additional funding was allocated to the Student Assistance Fund and income thresholds were increased. In response to COVID-19 we adapted our specialist services to support the complex needs of our Access students by developing an online system where students could drop in for advice using virtual platforms. Students were offered a range of alternatives to face-to-face interactions, including email, telephone and Zoom meetings. A remote Occupational Therapy and Learning Support Service was also developed to provide one-to-one support for students with disabilities who were finding the transition to college and/or the transition to remote learning challenging. Increased investment was made in Assistive Technology tools. Students requiring tools that could not be provided remotely had these posted to their homes and/or a collection service was arranged on campus (when safe to do so). Face-to-face training

New laptop lending kiosk for use across campus.

// This year saw 142 Cothrom na Féinne scholars receive awards – 48 sanctuary students, 93 undergraduate students and 14 graduate students. A further 8 UCD Access students received HEA 1916 Bursaries, while 46 were awarded the NUI Grant Scheme for Students with Disabilities (O'Brien Bequest) **//**

was provided online via Zoom and additional instructional materials were created. UCD ALL staff also arranged facilitated online study sessions for students to gain the skills they need for the technology to succeed. This year saw 142 Cothrom na Féinne scholars receive awards – 48 sanctuary students, 93 undergraduate students and 14 graduate students. A further 8 UCD Access students received HEA 1916 Bursaries, while 46 were awarded the NUI Grant Scheme for Students with Disabilities (O'Brien Bequest).

Student Advisers assisted double the number of students who were seeking financial support than in 2019/20, via both the Student Assistance Fund and the Student Welfare Fund. Almost 800 students received funding from the Student Support Fund, the fund aimed at those students from low-income households. The Student Assistance Fund also supports part-time students and lone parents. A total of 84 lone parents and part-time students received financial support, allowing them to continue their studies.

We distributed approximately €7.75 million of HEA funding to 616 graduate research students to support them because of the disruption to their studies. On average each student received €6,000 to cover a four-month extension to their research. This was matched with a trimester no fee extension to registration.

Delivering Our Programmes

Our faculty continued to develop new approaches to teaching and curriculum design to support their students' learning. Bespoke resources and webinars were also introduced to support faculty to upskill rapidly in different aspects of online teaching, learning and assessment. There were 1,093 enrolments to these webinars; webinar recordings and step-by-step resources were made available via the UCD Teaching and Learning website. Our cross-institutional network of educational technologists (ETAN) met on a fortnightly basis, sharing practice ideas, developing online solutions for faculty in terms of presentation and delivery of material, structuring and supporting the online assessment processes and supporting broader initiatives such as developing the UCD Virtual Classroom Guidelines.

We delivered a comprehensive at-distance assessment schedule, except for some clinical modules, that were conducted face-to-face in accordance with the prevailing government guidelines. Advice and guidance for students on preparing and taking online exams was provided in a dedicated webpage on the Assessment, UCD Registry website. UCD Assessment supported faculty in using new assessment reports, a new grade approvals process and students received their results in accordance with the published guidelines.

An eProctoring pilot project was undertaken in the context of the restrictions on in-person examinations, to ensure the equity, fairness and security of the UCD assessment process. A 'Record and Review' eProctoring solution has been utilised for 719 exam sittings across six separate modules to date, with significant learnings gained through feedback from faculty, staff and students involved.

Throughout the COVID-19 pandemic, UCD Careers Network delivered events and services online and further enhanced provision through the implementation of a new virtual Careers Centre in partnership with Abintegro Ltd. Known at UCD as 'My Career', the introduction of an extensive platform of information, tools, advice and learning is democratising access to career supports which are now available virtually 24/7, 365 days per year. While at the very earliest stage, student engagement levels are encouraging with 16,375 logins recorded and 29,290 activities completed online. I am pleased to report that the UCD Careers Network team received national and international recognition this year when they were placed first in the Association of Higher Education Careers Services' Excellence in Employability Awards for Social Impact Week and by the UK's Association of Graduate Careers Advisory Services (AGCAS) when a member of the team won the Outstanding Newcomer Award. The team successfully completed a peer quality review process to retain membership of AGCAS. They have also contributed enormously to UCD retaining the number 1 position in Ireland as judged by QS on the Graduate Employability Ranking.

Despite continuing COVID-19 restrictions, the Library remained open to students, faculty and staff throughout 2020/21. The COVID-19 disruptions required the Library to adapt rapidly to change, developing innovative approaches through the introduction of a virtual reference service, the establishment of a 'Library Dashboard' displaying real-time laptop and seat availability, building occupancy levels and the management of online seat bookings to support additional non-library study spaces across campus.

We initiated a university-wide consultation to develop a new *Education and Student Success Strategy 2021-25*. Colleagues in UCD University Secretariat developed new approaches to coordinating workshops to ensure the strategy was shaped by the voices of students, faculty and staff from across the University.

Connecting the Community

COVID-19 meant many of our sports clubs and societies were unable to return to training, practice, competitions and events during the 2020/21 academic year, however this did not affect their commitment to engage with their members and with the community. With the support of the UCD Student Services team, sports clubs and societies created their very own bespoke virtual events resulting in 650 online student events from September to December 2020 alone. Events ranged from sports club officer workshops where over 400 members attended training and development opportunities to live virtual debates with the L&H society. UCD Cinema adapted its offering by teaming up with the online film subscription service Mubi, guaranteeing students free access to diverse art and cultural films from across the globe.

UCD Sports Club members continued to once again fundraise and volunteer their time to play a positive role within the community. Over €37,000 was generated in total for numerous charities

nationwide including Breast Cancer Ireland, the Irish Cancer Society and Temple Street Children's Hospital Foundation. In addition, UCD Student Services in conjunction with Healthy UCD and UCDSVP supported 1,206 students from Ireland and 12 other countries to complete the UCD100 Challenge in an online context raising €23,115 for St. Vincent De Paul (UCD Society branch) over the 30 days.

The UCD community worked hard to enhance our students' on-campus experience and curricular delivery in the online context as evidenced by student engagement and the range of supports provided. UCD invested considerable resources in providing consistency for students' curricular and assessment experiences, in addition to providing targeted supports for faculty to support their teaching in the online context. Our institutional reports over the year capturing the student voice demonstrated that students and faculty engaged fully with the supports offered in the teaching and learning contexts. Most of our students performed very well in their assessments in exceptionally difficult circumstances. This is testament both to their own hard work and to the dedication of all members of the UCD community who are deeply committed to making our student experience a rewarding and positive one.

// With the support of the UCD Student Services team, sports clubs and societies created their very own bespoke virtual events resulting in 650 online student events from September to December 2020 **//**

None of these achievements would have been possible without our dedication, our collegiality and our positive outlook. This year challenged us, but equally has defined us as a community in our responses, commitment, and innovation to come through a challenging academic year. By its nature this report cannot capture all the activity but will provide a flavour of the significant achievements that we can reflect on with pride.

Professor Mark Rogers
Registrar and Deputy President

Pictured (l-r) presenting the cheque to SVP are Jason Masterson, Head of UCD Student Services; Ceolan Mc Mullin, Auditor, UCDSVP; Brian Mullins, Healthy UCD; Maria Heffernan, Healthy UCD; and Dominic O'Keeffe, Director of UCD Student Services.

Valuing Student Engagement, Partnership and Well-being

Student-Led Support during COVID-19
Peer Mentors
During the pandemic, UCD Access Leaders were central in helping students to maintain contact with the University, and their peers. Eighty Access Leaders provided a wide variety of virtual activities, including 'the Digital Ambassador Programme', which supported students with digital literacy skills; 'All in Common', which was led by second year students and brought first year students together for programme-based weekly study sessions, and 'Finding your Seat' – a video series developed by Access Leaders to prepare incoming students for return to campus.

Peer mentors, recruited as volunteers annually from all programme areas to help first year students settle into campus life, were central to the virtual welcoming efforts on campus, particularly during orientation. In normal years, physical campus tours were offered. In 2020, with support from UCD Student Recruitment, peer mentors were able to offer virtual tours of the campus using high fidelity video simulation. This provided an opportunity not only for new students to learn about the shape and function of the campus but also an important group interaction enabling the formation of friendships between students prior to their learning commencing. The peer mentors remained available to support students throughout the year.

Student Ambassador Programme
The UCD Student Ambassadors continued to operate throughout the year with the ambassadors hugely contributing to the various digital platforms and components of UCD's recruitment campaigns. The UCD Virtual Tour, launched in time for Orientation September 2020, formed a critical part of the programme with Student

Ambassadors using this digital platform to provide campus tours and orientation support to first year undergraduates and to graduate taught and research students.

The Ambassadors participated at all the major recruitment events which were delivered virtually including Higher Options, the Undergraduate and Graduate Open Days, Summer School, and other conversion events. They assisted prospective students with enquiries and showcased the UCD experience. They also maintained a presence on the UCD Unibuddy platform which allowed for continued Peer to Peer engagements and conversations across all programme areas throughout the year.

Valuing the Student Voice
A joint review of student representation, conducted with the UCD Students' Union, led to initiatives aimed at supporting student representatives in engaging with their roles effectively, and strengthening their participation in University decision-making. As part of this initiative, a new induction programme for SU sabbatical officers was introduced in June. It provides good practice guidance for student members of university committees to ensure that the student voice can be delivered in an impactful way.

New Singular Appeals Mechanism
A new Student Appeals Procedure was launched in September through UCD Student, Engagement, Conduct, Complaints and Appeals. It provides students with a single, accessible process for the submission of formal appeals against a range of University decisions.

Student Advising
In March, UCD Student Advisers rapidly moved to deliver their services virtually to students. In the initial days and weeks of the first lockdown, students needed information and support to address concerns around their studies. Students were directed to

Live Stream Fitness Classes: UCD Sport and Fitness Instructor takes a live class with our student members, April 2021.

relevant financial supports for purchasing equipment so that they could continue with their studies and keep up with their peers. As the pandemic continued, students also required emotional and social support, as well as financial. Loneliness levels and feelings of isolation increased among students during this time. In response, UCD Student Advisers organised virtual class meet-ups, virtual coffee mornings and virtual drop-in sessions. Regular coffee mornings organised by the Postgrad Research Student Adviser proved popular, and data collected from a student survey at the end of the academic year confirmed high satisfaction levels with the service provided by the UCD Student Advisory unit throughout the pandemic.

Health, Well-being and Bereavement Support

UCD Counselling and Health teams maintained both a virtual and campus presence through the pandemic. They availed of the additional HEA funding to amplify service provision, including an increase in counselling staff numbers, an increase in the provision of external counselling partners and a planned increased in medical resourcing following the full return to campus. Their role in supporting students who were living at home and on the campus was a critical element in maintaining a safe learning and teaching environment for all.

Our student's spiritual well-being was supported by the UCD Chaplaincy unit in the form of online and on-campus activities. Socially distanced 'Walk & Talk' sessions were hosted when guidelines allowed, an online multi-faith prayer wall was established, weekly virtual coffee mornings were held, and a live-stream camera was installed for student, faculty, staff and community mass followers. A bereavement counselling programme was initiated for those who suffered grief and loss within their family. The programme was a great source of comfort when the emotional impact of grieving was enhanced due to the isolation and loneliness of COVID-19 restrictions.

Virtual Access to Sport and Fitness and New Well-being Hub

UCD Sport and Fitness moved online and implemented a successful series of Live Virtual Fitness Classes. Over 2,300 student members subscribed to the classes. Additionally, a Well-being Hub, was established, enabling student members to take fitness classes and explore fitness and mental health resources on-demand from the comfort and safety of their homes. The Hub was accessed by over 10,000 students, affording them an outlet to exercise and absorb additional resources such as healthy recipes, mindfulness materials and podcasts at a time most convenient to their study pattern.

Anonymous Reporting

The need for members of the University Community to report incidents of bullying, harassment and sexual misconduct anonymously as well as formally was recognised through the work of the UCD Ending Sexual Violence and Harassment in Third Level Education Group and led to the successful launch of the *UCD Report and Support* reporting system in 2020. The University is using the anonymous data collected to target actions and initiatives aimed at raising awareness and preventing future incidents and in 2021 became the first Irish university to publish such data. The UCD Student Engagement, Conduct, Complaints and Appeals team has also partnered in a cross-institutional sectoral project towards the development of a similar tool to be used by other institutions called 'Speak Out'.

Promoting Excellence in Teaching and Learning

University Teaching and Learning Awards

A call for nominations for the 2019/20 UCD Teaching and Learning awards was met with enthusiasm by UCD students, who submitted 2,867 nominations. In their nominations many students gratefully highlighted the additional support they received due to the pandemic. The content and volume of their nominations is a testament to the huge achievement of UCD faculty and staff in creating such a positive impact on so many lives. Congratulations on the wonderful achievements of the UCD 2019/20 Teaching and Learning Awardees:

Teaching Excellence
- Dr Anthony Cronin, UCD School of Mathematics and Statistics
- Dr Sarah Fulham-McQuillan, UCD Sutherland School of Law
- Dr Melinda Halasz, UCD School of Medicine
- Dr Olive Lennon, UCD School of Public Health Physiotherapy and Sports Science
- Ms Marion Maher, UCD School of Medicine
- Dr Deirdre McGillicuddy, UCD School of Education
- Dr Neal Murphy, UCD School of Mechanical and Materials Engineering
- Dr Mark Pickering, UCD School of Medicine
- Dr Catherine Redmond, UCD School of Nursing Midwifery and Health Systems
- Mr Emmett Scanlon, UCD School of Architecture, Planning and Environmental Policy

Outstanding Contribution to Student Learning
Individual Awardee
- Dr Lisa Padden, UCD Access and Lifelong Learning
Team Awardees
- Architectural Design VII 'Open Heart City' Staff
- UCD Centre for Safety and Health at Work

UCD Fellowships in Teaching and Academic Development

Two Fellowship research teams which formed in 2018 to research on the themes of 'Teaching and Learning Across Cultures' and 'Designing for Learning in the VLE' have completed their work. The outputs from their work include an 'Intercultural Teaching and Learning 101 Tool' which includes seven reflective questions to help embed intercultural learning opportunities for students and a framework to promote the development of students' metacognitive skills through Brightspace. The outputs will be disseminated throughout UCD and are available on the UCD Teaching and Learning website.

UCD Awards for Excellence in Doctoral Supervision

This year, due to the high number of nominations and the quality of submissions received, two faculty members, Professor Eilish McAuliffe, UCD School of Nursing, Midwifery, and Health Systems and Associate Professor Benjamin Cowan, UCD School of Information and Communication Systems received the annual 'Dean's Award for Excellence in Doctoral Supervision'.

UCD Teaching and Learning organised an Intercultural Learning conference in May.

UCD Teaching and Learning Intercultural Learning Symposium

The fifth UCD Teaching and Learning annual symposium was held online for the first time. It was a wonderful opportunity to bring together research, international expertise, and shared experiences of colleagues on the theme of Intercultural Learning. The keynote was delivered live from Florida International University. UCD and international experts came together to focus on intercultural learning in UCD, to explain what intercultural learning is, what cultural identity and diversity are, why these are important in education and how students benefit from intercultural learning.

The Technology Enhanced Learning for ALL Series (TEL ALL)

The TEL All series is jointly hosted by UCD Teaching and Learning and UCD IT Services in conjunction with UCD's College and School Leaders of Teaching and Learning and the Educational Technology Advisory Network (ETAN). The 2021 event was themed *Technology Enhanced Learning for All: Insight by Hindsight* which aimed to provide an opportunity for faculty across UCD to share their experiences of teaching and assessing online. In addition, a student panel who shared their experience of learning online was included.

TEL ALL Webinars

The aim of this years 'TEL All' webinars was to assist faculty prepare their blended and online modules for the upcoming trimester and to complement related offerings by both UCD IT Services and UCD Teaching and Learning. These sessions were delivered by School-based Educational Technologists who shared their pedagogical and technical expertise. These lunchtime webinars delivered online, offered practical advice and use cases from Educational Technologists.

Virtual Classroom

Following a review of the Virtual Classroom service for teaching, Zoom was selected as the provider for the 2021/22 academic year. Zoom was fully integrated with Brightspace, and updated teaching and learning support resources and 'Zoom for Teaching' workshops continue to be offered by UCD IT Services. A Zoom account is provisioned for all students allowing them to attend online lectures and collaborate with peers. Launched in March, Ally is a content accessibility tool that helps build a more inclusive learning environment and improve the student experience by helping students take clear control of course content with usability, accessibility and quality in mind. Ally will assist both with the University's objective of University for All and the Universal Design principles for teaching and learning, providing the student population with alternative options to receive their learning materials.

New Academic Advising Initiative

UCD students have access to a range of advice and support services. Notwithstanding this, we identified a policy gap with reference to the formalised provision of academic advice. This initiative has been set up to develop an institutional framework for academic advising in partnership with students and in consultation with the wider UCD community. It is envisaged that the framework will be sufficiently flexible to facilitate the development of bespoke academic advising systems in UCD, reflecting different advising contexts, student cohorts and disciplinary needs. Following an application by UCD Teaching and Learning, this initiative is being funded by €475,000 from the HEA via the National Forum for the Enhancement of Teaching and Learning.

Professional Development in University Teaching

Growing numbers of UCD faculty are developing their teaching by enrolling in UCD's University Teaching and Learning Programmes. There are three accredited programmes offered, facilitating participants to choose a programme that fits around their professional and personal commitments. The programmes transitioned to online delivery in 2020/21 and provided critical support and development for faculty on designing effective online teaching, learning and assessment. There were 69 graduates from the Professional Programmes this year.

Enhancing the Graduate Student Experience

Researcher Supervisor Support and Development

This year the Research Supervisor Support and Development programme moved online with seven workshops delivered by UCD and additional workshops offered from TCD and RCSI. Topics covered included the fundamentals of research supervision, attracting the 'right' candidate, navigating styles and leadership in supervision. The programme was accessed by 367 supervisors, an average of 52 attending each workshop with some sessions exceeding 90 participants, and 18 supervisors obtained certification.

Guest speakers included Professor Bob Harris, Academic Vice-President for Doctoral Education at the Karolinska Institute and Hugh Kearns, Flinders University, who is a leader in the field of student and supervisor development.

Skills Development for Doctoral Research Students

The number of Transferable Skills online workshops for graduate research students, increased this year. They now also cover a wider range of topics, including the PhD@UCD, project management, thesis writing, working with your supervisor, well-being and getting the most out of your RPDP.

The Thesis Boot Camp, an intensive, 3-day thesis writing support initiative, was offered three times online this year. To date, over 100 doctoral students participated in the activity, which was developed by Dr Peta Freestone, Napier University.

As part of our commitment to research students, they were encouraged to showcase their research in the 'Thesis in 3' and 'Visualise Your Thesis'. This year a record number of entries was received for the Thesis in 3 competition and the winner was put forward to the U21 Global competition.
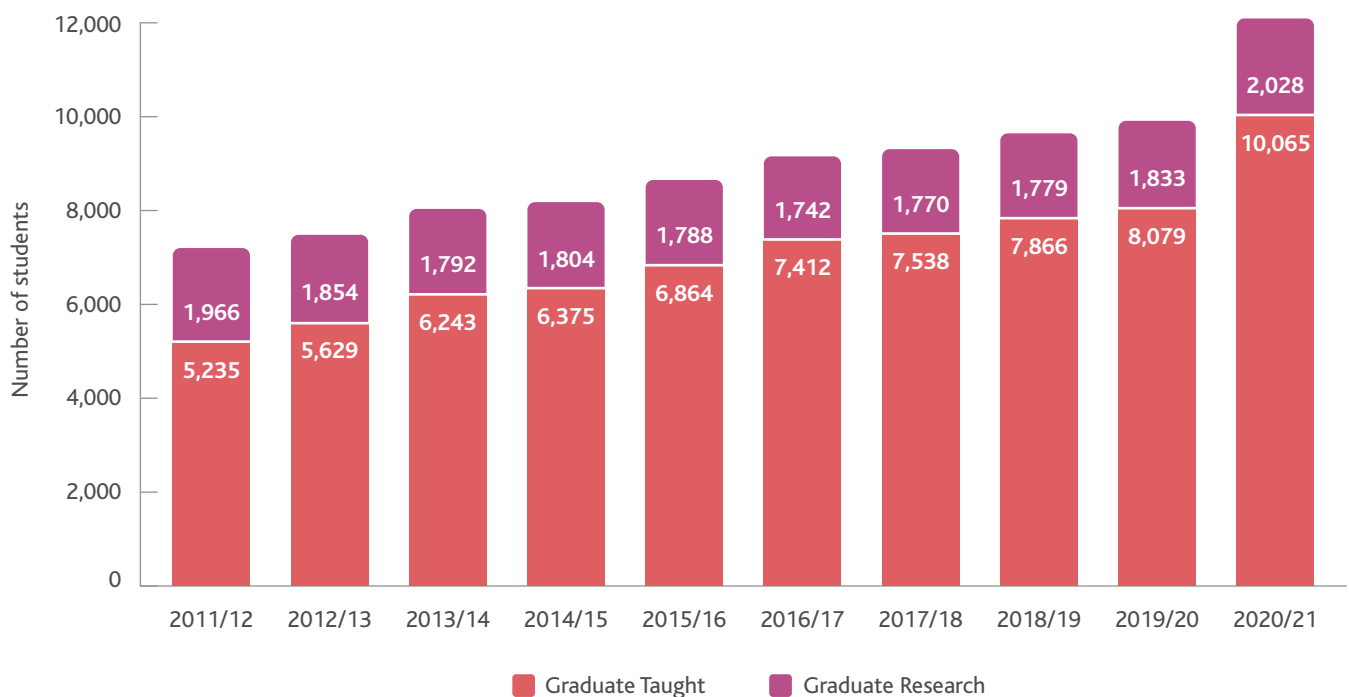

12,093 UCD Graduate students

40% increase over the past five years

Number of students

Year	Graduate Taught	Graduate Research
2011/12	5,235	1,966
2012/13	5,629	1,854
2013/14	6,243	1,792
2014/15	6,375	1,804
2015/16	6,864	1,788
2016/17	7,412	1,742
2017/18	7,538	1,770
2018/19	7,866	1,779
2019/20	8,079	1,833
2020/21	10,065	2,028

■ Graduate Taught   ■ Graduate Research

// A new UCD Graduate Studies website was launched in early 2021, with graduate students, supervisors, and professional staff user experience to the forefront. The website includes features such as the research student roadmap and dedicated portals of information for graduate stakeholders in UCD and beyond **//**

Graduate Research Students – Staying Connected During Covid-19

Initiatives were introduced to support students including monthly newsletters from the UCD Dean of Graduate Studies and 'Q&A sessions with the Dean'. UCD Graduate Studies also participated in Fireside Fridays led by the UCD Careers Network, discussing topics of particular interest such as effectively using the RPDP.

New Graduate Studies Website

A new UCD Graduate Studies website was launched in early 2021, with graduate students, supervisors, and professional staff user experience to the forefront. The website includes features such as the research student roadmap and dedicated portals of information for graduate stakeholders in UCD and beyond.

New Graduate Research Governance Board

The Graduate Research Board came into effect in September 2020 following the decision by Academic Council, in February 2020, to consolidate the governance of graduate research programmes in the University. The remit of the Board includes programme governance, quality assurance, the management of student decisions and the development of strategy for graduate research programme in UCD. The membership of the Board includes representatives from Colleges and the student body. The Board, and the associated support team, began operations during the COVID-19 pandemic. They developed resources to enable staff to interact remotely with the Board during challenging times including the provision of dedicated support contacts, drop-in sessions and guides. During the pandemic period, the Board also introduced revised guidelines for virtual Viva Voces and Theses as a Collection of Papers.

Promoting Quality Assurance and Excellence in Governance

Institutional Review

During 2020/21 the Institutional Quality Improvement Steering Committee monitored the implementation of the Institutional Quality Improvement Plan which was submitted to QQI in June 2020 and outlined the University's response to each of the Review Team recommendations. As highlighted in last year's report, UCD's approach to implementing the recommendations mirrored our core values of excellence, creativity, integrity, collegiality, engagement and diversity. In June 2021 the UCD Governing Authority approved the Institutional Quality Improvement Progress Plan (IQIPP) which provided a one-year update on implementing the recommendations. The IQIPP was submitted to Quality and Qualifications Ireland

(QQI) in July 2021. A total of 18 recommendations were identified with 50 associated actions by the UCD Steering Committee, with eight embedded within the UCD Strategy for Education and Student Success. 36% of these actions were completed by June 2021 and the remaining are currently in progress to agreed timelines. A report will be provided annually to the UCD Governing Authority.

Engagement and Compliance with Legislation and External Quality Assurance Frameworks

UCD submitted its Annual Quality Report to QQI in March 2021, providing details of the University's internal quality mechanisms and their development, along with reporting on quality implementation, developments, and enhancements for the reporting period 2019/20. The template was revised for 2021 and included the submission of Case Studies. UCD submitted three case studies – GRB Drop-In Clinics for Graduate Research Board; Maintaining and Enhancing the Undergraduate Student Orientation Experience During the COVID-19 Pandemic; and Delivering Unit Quality Reviews Remotely.

Participation in QQI activity and policy development during 2020/21 included sectoral and institutional engagement on QQI's Protocol on 'Towards Principles for Accreditation and other Professional Engagements', the thematic review of the QQI Cinnte Institutional Reviews, the thematic analysis of Programme Approval and Review Reports, and the Green Paper on Qualifications and Irish Register of Qualifications. UCD continued its representation on the National Academic Integrity Network and the sectoral approach of supporting a culture of academic integrity.

Quality Reviews

During 2020/21 quality review site visits took place in UCD Teaching and Learning, UCD School of Sociology, UCD School of Agriculture and Food Science, UCD School of Electrical and Electronic Engineering, and UCD School of Public Health, Physiotherapy and Sports Science. These site visits were conducted remotely and created an opportunity to review our approach to conducting site visits and engagement of stakeholders, as well as ensuring the University's adherence to legislative requirements, QQI Core Statutory Guidelines, UCD Governance requirements and Policy on Quality Assurance and Quality Enhancement, and European Standards and Guidelines. The impacts of COVID-19 and postponement of reviews required a review of our current seven-year quality review schedule which was completed in January 2021. During the reporting year twelve schools and units commenced or continued preparations for their quality reviews with their site visits scheduled for trimester 1 and 2 of academic year 2021/22. Ongoing monitoring of quality improvement plans has continued, cognizant of each unit's ongoing resourcing and activity. Alignment of Quality Improvements Plans with the annual and five-year planning cycle for schools and units was established for 2021 which will enable reporting on the implementation of review group recommendations.

A joint collaborative project commenced in May 2021 between the UCD Quality Office and UCD Research to develop and integrate the UCD Research Strategy and metrics within the University quality processes and is due for completion in autumn 2021. This will include a review of the current research metrics, enhancing and integrating current research activity and policies into the review process (guidance, SAR template, site visit) and review group reports.

UCD Academic Council

Under the stewardship of the UCD University Secretariat, a new and significantly different Academic Council has been created within UCD. Guiding principles have been set for the composition and remit of this critical committee, which sits at the apex of academic governance. Following approved resolutions from both the previous UCD Academic Council and the UCD Governing Authority, elections took place in the Summer of 2021. The elections were conducted electronically, a first for the University, and signalled a significant step towards gender balance in major decision-making in UCD.

UCD Governing Authority

The UCD University Secretariat continued to deliver operationally critical support to the UCD Governing Authority, Academic Council, and the University Management Team, and to nine committees of these bodies, ensuring compliance with the Universities Act 1997, the *Code of Governance for Irish Universities 2019* and HEA requirements. The sudden need to translate this business to a virtual platform was facilitated and the opportunities of this new way of working were identified and leveraged. This has included supporting and inducting new members of the Governing Authority and its committees (without the opportunity to meet in person) and preparing annual reports to ensure transparency and oversight of all committee responsibilities.

Throughout this year, governance procedures within UCD have been greatly enhanced. A robust assurance framework was implemented in respect of the compilation of the Annual Governance Statement 2019/20, such that both the University's Audit and Risk Management Committee (ARMC), and the Governing Authority could confidently assent to its submission. Likewise, the embedding of the Policy Management Framework has enabled the structured development of necessary policies; formulated with critical stakeholder input.

The UCD University Secretariat also supported the Governing Authority to undertake a self-assessment of its own operations and effectiveness. A report detailing the findings of this exercise was considered by the Governing Authority in September 2020, and the eight recommendations contained in that report were approved and implemented to ensure that specific and demonstrable actions were taken to further improve performance. Similar self-assessments of both the ARMC and the Finance Remuneration and Audit Management Committee were also conducted, leading to measurable improvements.

// Under the stewardship of the UCD University Secretariat, a new and significantly different Academic Council has been created within UCD. Guiding principles have been set for the composition and remit of this critical committee, which sits at the apex of academic governance //

Committee Secretary Handbook

The University Secretariat reviewed and updated the Committee Secretaries' Handbook, providing new sections to support committee secretaries across UCD to project best practice with respect to GDPR and to give life to the Irish Language Scheme within committee meetings and communications.

Delivering Library, Information and Knowledge Management Services

Supporting Student Learning

UCD Library continued to support the student educational experience and digital transformation through:

- Continued support for the transition to online education by prioritising the purchase of digital resources including 106,931 ebooks.
- Delivery of digital literacy skills workshops and webinars, reaching over 10,000 students.
- Enhanced support for the development of digital literacy skills among students through the appointment of a new Digital Learning Librarian, partially funded by the IUA EDTL project.
- Development of a new suite of online tutorials, videos and infographics to support remote learning, including 'Identifying Fake Health Information' and 'Open Book Exams and Referencing'.

Identifying Fake Health Information infographic.

President of Ireland, His Excellency Michael D Higgins visiting UCD Special Collections to record a selection of his poems and present manuscripts to the Irish Poetry Reading Archive.

A novel approach to accessing the Library was developed in which students were offered the opportunity to book study spaces, and four large additional study venues across the campus were offered through the same booking system which more than doubled the options for students and helped to maintain a well-spaced and safe environment.

Supporting Research Activities
Despite the challenges experienced during 2020/21, UCD Library made significant improvements in supporting researchers including:
- Negotiating 20 new transformative Open Access publisher agreements in collaboration with IReL, maximising the impact of UCD research, facilitating compliance with research funder requirements and more equitable access to research.
- Working closely with UCD Research and IT Services to address

emerging needs of researchers, including specialised training and the delivery of the Discovery Webinar series.
- The addition of seven new datasets to the Irish Social Science Data Archive (ISSDA). Over 500 requests for data have been received, enabling data sharing and progressing advancement of knowledge.

Cultural Heritage
Activities raising awareness of the value and importance of UCD Cultural Heritage collections continued including:
- A visit from President of Ireland, Michael D Higgins to record a selection of his poems and present manuscripts to the Irish Poetry Reading Archive.
- A collaborative two-year oral history project, 'People's History of Dún Laoghaire' with the National Folklore Collection and Dún Laoghaire Rathdown County Council, including 250 original recordings and transcripts.
- A collaboration between Scratch Films, RTÉ and the National Folklore Collection, 'The People's Civil War', including 100 video interviews with surviving relatives and footage used in two RTÉ documentaries.
- Purchase of the UCD alumna and significant short story writer, Mary Lavin's personal correspondence, using an award of €100,000 from the UCD College of Arts and Humanities support fund.
- Contribution towards the purchase of three letters from James Joyce to Constantine Curran, from the UCD College of Arts and Humanities support fund.

// A novel approach to accessing the Library was developed in which students were offered the opportunity to book study spaces, and four large additional study venues across the campus were offered through the same booking system //

Increasing Agility And Effectiveness

Agile Training

Skills development is a key element of supporting agility, effectiveness and continuous improvement across the University. The challenges of remote working necessitated a reframing of our training offerings. They needed to support working in a 'distributed office' and provide training in a way that fitted with and adapted to emerging needs as remote working evolved. This resulted in shorter sessions with more variety and a narrower focus. The reach of training subsequently increased, with over 470 participants across 40 sessions, including 200 session participants in our July Work Smarter Together (WST) summer school.

University Strategy – Enabler 4

Arising from its focus on processes, services and operational excellence, we began the first stage of our work arising from Enabler 4 of UCD's strategy 2020-2024 – the digital transformation of our operations. Enabler 4 puts the focus on simplifying and reducing the burden of routine tasks for our faculty, staff and students. UCD Agile used experience mapping, service design, Lean and agile techniques, grounded in an extensive interview cycle, to produce an analysis with both compelling digital transformation themes and underlying detailed material. The key to the power of this work lies in its focus on people and the focus they will bring to what we do in digital transformation and how we will judge its success.

Work Smarter Together

Our Work Smarter Together (WST) biennial event celebrates, supports and shares the creativity and collaboration of the broad UCD community. At WST 2021, online from 8-12 March, over 400 members or the University community gathered for 23 sessions with 66 presenters, including keynotes, breakout sessions, a poster exhibition and workshops. This opportunity to share, learn and be inspired was of particular importance during the challenges of COVID-19 as it was an opportunity to recognise what people have achieved, as well as their commitment, motivation, and creativity.

Incoming Undergraduate Degree Students

	2016/17 entrants	2017/18 entrants	2018/19 entrants	2019/20 entrants	2020/21 entrants
Under-represented entrants	**742**	**744**	**887**	**985**	**1,118**
Mature entrants	**258**	**248**	**242**	**254**	**258**
Mature Years HEA Support only	87	92	87	85	86
Mature Years Support and Concession	171	156	155	169	172
DARE entrants	**251**	**262**	**335**	**380**	**423**
DARE HEA Support only	146	165	178	184	205
DARE below Support and Concession	105	97	157	196	218
HEAR entrants	**217**	**252**	**219**	**231**	**269**
HEAR HEA Support only	117	148	90	90	122
HEAR below Support and Concession	100	104	129	141	147
Other progression routes	**98**	**104**	**184**	**219**	**263**
FETAC	98	104	181	217	262
HETAC	0	0	0	0	0
Other Progression	0	0	4	2	1
Total UCD	**4,569**	**4,564**	**4,397**	**4,583**	**4,957**

RESEARCH, INNOVATION AND IMPACT

Introduction from Vice-President for Research, Innovation and Impact

This academic year was the first conducted entirely under the shadow of the COVID-19 pandemic.

In June 2021, UCD Vice-President for Research, Innovation and Impact, Prof Orla Feely was inaugurated as the 129th President of Engineers Ireland.

The UCD research community once again rose to this challenge and continued to deliver and support outstanding research and innovation despite the very difficult circumstances. I would like to note in particular the contribution of those who worked very hard to keep labs and other facilities for research and innovation open in full compliance with public health guidance. Their work allowed us to advance research and innovation on campus throughout the year in a safe and productive environment.

I was delighted to host Simon Harris TD, Minister for Further and Higher Education, Research, Innovation and Science when he visited UCD in June to hear about the COVID-19 research being conducted on campus and to convey his thanks to those involved. The contribution of the UCD research community, including our colleagues at the National Virus Reference Laboratory, to Ireland's response to the pandemic has been extraordinary in its scale, quality and impact.

An important event during the year was the launch of 'Shaping the Future,' the UCD Strategy for Research, Innovation and Impact to 2024. The Strategy has four pillars: Excellence, Impact, People and Culture & Environment, and we are now rolling out a set of ambitious actions in support of each of these. The four UCD strategic themes – Creating a Sustainable Global Society, Transforming through Digital Technology, Building a Healthy World and Empowering Humanity – are proving very powerful in structuring and advancing our research activities.

Externally funded research awards registered during 2020/21 amounted to €131.9 million. Notable among these were a European Research Council Advanced Grant to Professor Kathleen James-Chakraborty, UCD School of Art History and Cultural Policy and UCD Humanities Institute, and second-phase funding for the iCRAG SFI Research Centre in Applied Geosciences, led by Professor Murray Hitzman, UCD School of Earth Sciences. Reflecting the University's commitment to sustainability, Professor Kevin O'Connor, UCD School of Biomolecular and Biomedical Science won the SFI Future Innovator Prize for the development of a zero-carbon farm.

Emeritus Professor Mary Daly, UCD School of History, became only the second woman to win the Royal Irish Academy Gold Medal. Professor Patrick Guiry, UCD School of Chemistry and Professor Patricia Maguire, UCD School of Biomolecular and Biomedical Science and UCD Institute for Discovery, were awarded the SFI Mentorship award. Associate Professor Catherine Cox, UCD School of History won the UCD Research Impact Case Study Competition 2020 for her work on mental health among prisoners, and Professor Fiona Doohan, UCD School of Biology and Environmental Science, received the NovaUCD Innovation Award for her work on improving the sustainability of crop production systems in Ireland and globally. On a personal note, it was a great honour to be elected President of Engineers Ireland in June.

Over the course of the year, NovaUCD, the University's recently-expanded hub for new ventures and entrepreneurs, established a number of important new partnerships in Ireland and internationally to expand its reach and impact. The University also launched a number of research centres in important areas, including C-Space, the UCD Centre for Space Research; C-QuEST, the UCD Centre for Quantum Engineering, Science and Technology; and CfIT, the UCD Centre for Irish Towns.

It is a very interesting time for research and innovation, as post-pandemic adjustments, geopolitical shifts and the impacts of climate change and of digitalisation present challenges and opportunities both globally and locally. I know that the UCD research and innovation community will respond to these with their usual energy and imagination.

Professor Orla Feely
UCD Vice-President for Research, Innovation and Impact

Research Funding 2020/21

Despite the difficulties imposed by the COVID-19 pandemic, the value of externally funded research awards registered during 2020/21 amounted to €131.9 million, an increase of approx €9.6 million on last year's performance (see Table 1). Table 2 shows the largest research grants awarded this year. This represents an increase of 7.8% on last year's performance and the second highest value of annual research funding achieved by the University. This is an excellent performance, particularly in light of the pandemic.

Science Foundation Ireland (SFI) is the main source for this research funding. The value of SFI awards in the current year is up 50%, largely due to the second-phase funding for the iCRAG SFI Research Centre.

While the level of awards from the European Commission is lower than the excellent performance in 2019/20, there were some notable achievements in European funding, including ERC grants and major awards in the area of clinical trials and of psoriatic arthritis.

HEA COVID-19 Extensions Funding

Many members of the UCD research community faced very difficult personal and professional circumstances as a result of the pandemic. Among the most severely affected were our research students and postdoctoral researchers, many of whose research was significantly delayed and in danger of non-completion. To account for this, the Department of Further and Higher Education, Research, Innovation and Science made funding available through the Higher Education Authority to support costed extensions to research that had been interrupted by the pandemic. UCD received €8.27 million under this scheme, which enabled us to fund extensions for 616 research students and 218 researchers. We are very grateful to the Department and the HEA for this vital support.

Research Publications

Details of all research publications for the period of this Report are available online at **www.ucd.ie/research/publications**

Table 1: Research Awards

Year	Total value contracts signed incl. contributions to overheads (€ million)	Total contributions to overheads (%)	Total number of contracts awarded	Number of proposals submitted
2007/2008	115.9	17.3	445	1,090
2008/2009	116.8	21.0	537	1,150
2009/2010	49.5	6.7	449	1,069
2010/2011	103.3	17.0	510	1,123
2011/2012	75.7	9.5	532	1,263
2012/2013	113.3	17.4	614	1,167
2013/2014	114.1	16.5	672	1,245
2014/2015	106.3	17.2	627	1,603
2015/2016	93.7	13.2	652	1,372
2016/2017	97.50	12.3	661	1,336
2017/2018	122.38	17.3	706	1,411
2018/2019	151.04	20.5	607	1,354
2019/2020	122.34	16.1	737	1,468
2020/2021	131.92	16.5	752	1,685

Funding source	Number of contracts	Value (€ million)
Science Foundation Ireland (SFI)	79	44.99
European Commission (EC)	49	17.91
Irish Research Council (IRC)	125	9.96
Enterprise Ireland (EI)	108	12.83
Department of Agriculture, Food and the Marine	7	3.43
Others	384	42.81
Total	752	131.92

Table 2: Largest Grants Awarded to UCD 2020/21

Leader	Funding source	Programme	Title	Total direct costs €
Professor Murray Hitzman with Professor Peter Haughton, Professor Frank McDermott, Professor John Walsh, Dr Conrad Childs, Dr Tom Manzocchi – UCD School of Earth Sciences; Professor Jacky Croke – UCD School of Geography; Dr Geertje Schuitema – UCD School of Business; and Dr Mike Long – UCD School of Civil Engineering)	Science Foundation Ireland (SFI)	Research Centres – Renewal	iCRAG_Phase 2	20,009,704
The VP for Research, Innovation and Impact	Higher Education Authority (HEA)	HEA COVID Funding	HEA Support for COVID-19 Related Research Costed Extensions (Holding Account)	8,273,620
Professor Kathleen James-Chakraborty, UCD School of Art History and Cultural Policy	HORIZON 2020	ES – ERC Advanced Grant	Women, Race and the Global Dissemination of Modern Architecture (Expanding Agency)	1,666,325
Professor Dimitrios Zevgolis, UCD School of Mechanical and Materials Engineering	HORIZON 2020	ES – ERC Consolidator Grant	Advanced Cellular Hierarchical Tissue-Imitations based on Excluded Volume Effect (ACHIEVE)	1,661,416
Professor Robert Staszewski, UCD School of Electrical and Electronic Engineering	Enterprise Ireland (EI)	Disruptive Technologies Innovation Fund (DTIF)	QCoIr: Quantum Computing in Ireland: A Software Platform for Multiple Qubit Technologies	1,328,464
Professor Murray Hitzman, UCD School of Earth Sciences	Science Foundation Ireland (SFI)	Research Centres – Renewal Supplement	Centralised EPE Support to the SFI Research Centres Programme	1,220,000
Professor Steve Pennington and Professor Oliver Fitzgerald, UCD School of Medicine	Innovative Medicines Initiative Joint Undertaking (IMI JU)	Joint Technology Initiatives (JTI)	Promoting Early Identification and Improving Outcomes in Psoriatic Arthritis (HIPPOCRATES)	1,192,452
Professor Kevin O'Connor, UCD School of Biomolecular and Biomedical Science with Dr Fionnuala Murphy, UCD Biosystems and Food Engineering	Science Foundation Ireland (SFI)	Future Innovator Prize	Farm Zero C: Creating a carbon neutral resilient dairy farm – Phase 2	1,188,098
Professor Walter Kolch, UCD School of Medicine	HORIZON 2020	ES – Marie Sklodowska-Curie Co-funding of regional national and international programmes (COFUND)	Developing the Next Generation of Research Leaders in Precision Oncology (DevelopMed)	1,324,080
Professor Kevin O'Connor, UCD School of Biomolecular and Biomedical Science	HORIZON 2020	ES – Marie Sklodowska-Curie Co-funding of regional national and international programmes (COFUND)	Talent4BBI: Developing Talent for Bio-Based Industries of Europe (Talent4BBI)	1,193,280

Internal Research Funding

UCD invests significantly in funding research within the University. In 2020/21, the amount directly awarded to UCD's researchers from internal sources was €13.1 million.

In the 2021 Seed Funding programme, a total of 106 eligible applications were received across four strands: Dissemination and Outputs; Equality, Diversity and Inclusion; Visiting Professors; and the Career Development Award. There were 57 successful applications (approx 54%) resulting in awards of €186,841. The overall number of applications received this year is down on previous years, particularly under the Dissemination and Outputs Programme where awards support conference attendance, many of which were negatively impacted by the pandemic. Table 3 outlines the distribution of seed funding in 2020/21.

'Shaping the Future,' the UCD Strategy for Research, Innovation and Impact to 2024.

€13.1m

awarded to UCD's researchers
from internal sources

Table 3: UCD Seed Funding Scheme

2021 Seed funding by programme	Volume of applications	Value of applications €	Volume of awards	Value of awards €
Dissemination and Outputs	41	59,123	38	39,005
Equality, Diversity and Inclusion Strand A	6	58,032	3	20,000
Equality, Diversity and Inclusion Strand B	6	15,405	3	5,000
Visiting Professors – Incoming and Outgoing	12	106,295	6	47,837
Career Development Award	41	544,440	7	75,000
Total	106	783,295	57	186,842

2020 Seed funding by College	Volume of applications	Value of applications €	Volume of awards	Value of awards €
College of Arts and Humanities	4	14,483	4	10,893
College of Business	–	–	–	–
College of Engineering and Architecture	23	178,503	12	31,487
College of Health and Agricultural Science	34	335,616	17	68,292
College of Science	32	176,842	18	44,923
College of Social Sciences and Law	13	77,842	6	31,248
Total	106	783,285	57	186,842

Another important internal funding scheme is the UCD EQUIP Scheme, which is now in its third year. This scheme provides funding for core research equipment that will support excellent research and innovation by a broad base of UCD researchers. This year, 15 awards have been provided amounting to €1.804 million, and these are shown in Table 4.

Table 4: UCD EQUIP Programme

Lead applicant	Co applicants	Lead applicant college	Lead applicant school	Amount approved €	Equipment item
Professor Patrick Mallon	Dr Virginie Gautier, Dr Aoife Cotter, Dr Eoin Feeney	College of Health and Agricultural Sciences	UCD School of Medicine	33,846	Automated Liquid Nitrogen Storage System with a capacity of 32,000 Samples
Professor Breandan Kennedy	Assoc Prof Oliver Blacque, Asst Prof Jeffrey Glennon, Prof David Keegan, Prof Colm O'Brien, Asst Prof Niamh O'Sullivan, Asst Prof Alison Reynolds, Asst Prof Deborah Wallace and Prof Wenxin Wang	College of Science	UCD School of Biomolecular and Biomedical Science	43,000	OptoMotry HD System, a virtual-reality system to rapidly quantify visuomotor behaviour
Professor Brian Rodriguez	Dr Stephen Thorpe, Assoc Prof Grace Morgan, Dr Deirdre Brennan, Assoc Prof Niamh Nowlan, Dr Antonio Benedetto, Dr Sourav Bhattacharjee, Professor Dimitrios Zeugolis, Assoc Prof Susan Quinn, Assoc Prof Carl Ng, Prof Paula Bourke	College of Science	UCD School of Physics	145,202	Essential Atomic Force Microscope (AFM) Controller and Cantilever-Holder Upgrade
Professor Cormac Murphy	Prof Eoin Casey, Dr Tanja Narancic, Assoc Prof Siobhan McClean, Dr Joe Sweeney, Dr Patrick Caffrey, Dr Marina Rubini	College of Science	UCD School of Biomolecular and Biomedical Science	76,270	High performance liquid chromatography (HPLC) system
Associate Professor Emily Mark-FitzGerald	Prof Hugh Campbell, Alice Clancy, Prof Liam Kennedy, Prof Kathleen James-Chakraborty, Prof Paul Rouse, Assoc Prof Catherine Cox, Assoc Prof Conor Mulvagh, Dr Jennifer Wellington, Dr Harvey O'Brien	College of Arts and Humanities	UCD School of Art History & Cultural Policy	30,560	Photographic Technical and Materials Library / SFM Photogrammetric Digitisation Suite
Professor Eoin Casey	Prof Eoin Casey, Assoc Prof Susan Quinn, Assoc Prof James Sullivan, Prof Dermot Bougham, Dr Nan Zhang, Dr Jessica Whelan, Dr Veronica Sofianos	College of Engineering and Architecture	UCD School of Chemical Bioprocess Engineering	19,988	X-ray photoelectron spectroscopy, (XPS) data acquisition and processing
Professor Fiona McGillicuddy	Prof Kenneth Dawson, Prof David Brayden, Assoc Prof Siobhan McClean, Assoc Prof David O'Connell, Dr Yan Yan, Dr Ronald Halim, Assoc Prof Eileen Gibney	College of Health and Agriculture	UCD School of Medicine	126,282	Fast Protein Liquid Chromatography — used to analyze/purify protein mixtures
Professor Helen Roche	Prof Walter Kolch, Prof Desmond Tobin, Prof Catherine Godson, Prof Stephen Pennington, Dr Melinda Halasz, Dr David Gomez, Dr Lynne O'Shea, Assoc Prof Neil Docherty	College of Health and Agriculture	UCD Conway Institute	114,000	Digital imaging systems to visualize Western blots and quantify DNA and RNA levels

Lead applicant	Co applicants	Lead applicant college	Lead applicant school	Amount approved €	Equipment item
Associate Professor John O'Sullivan	Dr Jennifer Keenahan (co-lead), Assoc Prof Shane Donohue, Dr MD Salauddin, Dr Sarah Cotterill, Dr Kevin Nolan, Prof Jacky Croke, Dr James Herterich, Assoc Prof Mary Kelly-Quinn, Dr Grace Cott, Dr Mark Coughlan	College of Engineering and Architecture	UCD School of Civil Engineering	121,238	2-Dimensional Wave / Open Channel Flume
Professor Lorraine Brennan	Prof Patrick Guiry, Prof Declan Gilheany, Assoc Prof Grace Morgan, Prof Stefan Oscarson, Dr Marina Rubini, Dr Aifric O'Sullivan, Dr Breige McNulty, Dr Martina Wallace, Prof Frank Monahan, Dr Ronald Halim	College of Health and Agricultural Sciences	UCD School of Agriculture and Food Science	398,455	Upgrade of obsolete NMR
Associate Professor Margaret McGee	Prof Grace Mulcahy, Prof Catherine Godson, Prof Cormac Taylor, Prof Kenneth Dawson, Prof William Watson, Prof Lorraine Brennan, Prof Amanda McCann, Prof Orina Belton, Asst Prof Clare Reynolds, Asst Prof David Gomez, Asst Prof Ioscani Jiménez del Val	College of Science	Conway	155,367	CytoFLEX S Flow Cytometry Analyzer
Professor Nicola Fletcher	Prof Stephen Gordon, Dr Dimitri Scholz, Prof Ulla Knaus, Prof Grace Mulcahy, Dr Cillian De Gascun, Charlene Bennett, Dr Stephen Thorpe, Assoc Prof Virginie Gautier, Prof Wim Meijer, Dr Nan Zhang	College of Health and Agriculture	UCD School of Veterinary Medicine	118,692	Upgrade of CL3 laboratory for emerging virus research including SARS-CoV-2
Professor Stephen Davis	Prof Graeme Warren, Prof Tadhg O'Keeffe, Dr Helen Lewis, Prof Joanna Bruck, Dr Thomas Cummins, Assoc Prof Barry Molloy, Dr Jonathan Turner, Assoc Prof Shane Donohue	College of Social Sciences and Law	UCD School of Archaeology	96,615	Multi-sensor geomagnetic survey rig
Professor Stephen Thorpe	Prof Brian Rodriguez, Prof Desmond Tobin, Prof Kenneth Dawson, Assoc Prof Niamh Nowlan, Dr Nicola Fletcher, Assoc Prof Oliver Blacque, Dr Rainer Melzer, Dr Susanne Schilling, Dr Yan Yan	College of Health and Agricultural Sciences	UCD School of Medicine	79,993	PrepSEM – Renewal of electron microscopy sample preparation equipment
Professor William Gallagher	Prof Aurelie Fabre, Assoc Prof Antoinette Perry, Prof Amanda McCann, Prof Therese Kinsella, Prof Aoife Gowan, Prof Carel le Roux, Prof William Watson, Prof Walter Kolch, Prof Desmond Tobin, Prof Donal Brennan	College of Science	UCD School of Biomolecular and Biomedical Science	244,181	Tissue Imaging System – High-Throughput Fluorescent Scanner (Vectra POLARIS)

A third internal funding programme is the UCD Output-Based Research Support Scheme (OBRSS). Recognising that many of the day-to-day costs of research activity are not covered by grants, UCD developed this programme to disburse support funds to faculty based on their research outputs, as captured through publications and PhD supervision. During the past year, 1,026 faculty were awarded support funds through OBRSS. Details are shown in Table 5.

Table 5: Output Based Research Support Scheme

College	Volume of Awards	Value of Awards €
College of Arts and Humanities	103	68,370
College of Business	62	45,891
College of Engineering and Architecture	126	186,150
College of Health and Agricultural Sciences	272	331,519
College of Science	242	250,799
College of Social Sciences and Law	211	183,054
Other	10	7,243
Total	1,026	1,073,027

18%

of UCD's publications were in the top 10% of the most cited worldwide during the past five years

Analytics and Impacts

Publication Metrics

In 2020, there were 4,281 papers listed in Elsevier SciVal for UCD (see Figure 1). Although the coverage in this data does not reflect the totality of UCD's research outputs (which was 5,877 for the year), this is an important metric. UCD continues to produce the highest volume of academic publications in the country.

Academic Impact

Field-weighted citation impact compares the actual number of citations received by a paper with the expected number of citations for papers of the same document type (article, review or conference proceeding paper), publication year and subject field. A field-weighted citation impact of 1.00 indicates that an institution's publications have been cited exactly as would be expected based on the global average for similar publications. Using this measure, UCD's publications over the past five years are cited 72% more often than the world average, putting UCD on a similar plane with many other leading international research-intensive universities. During the past five years, 18% of UCD's publications were in the top 10% of the most cited worldwide. In addition, 60% of the publications were co-authored with institutions in other countries, emphasising UCD's position as a global university.

Figure 1: Number of publications recorded in SciVal per year
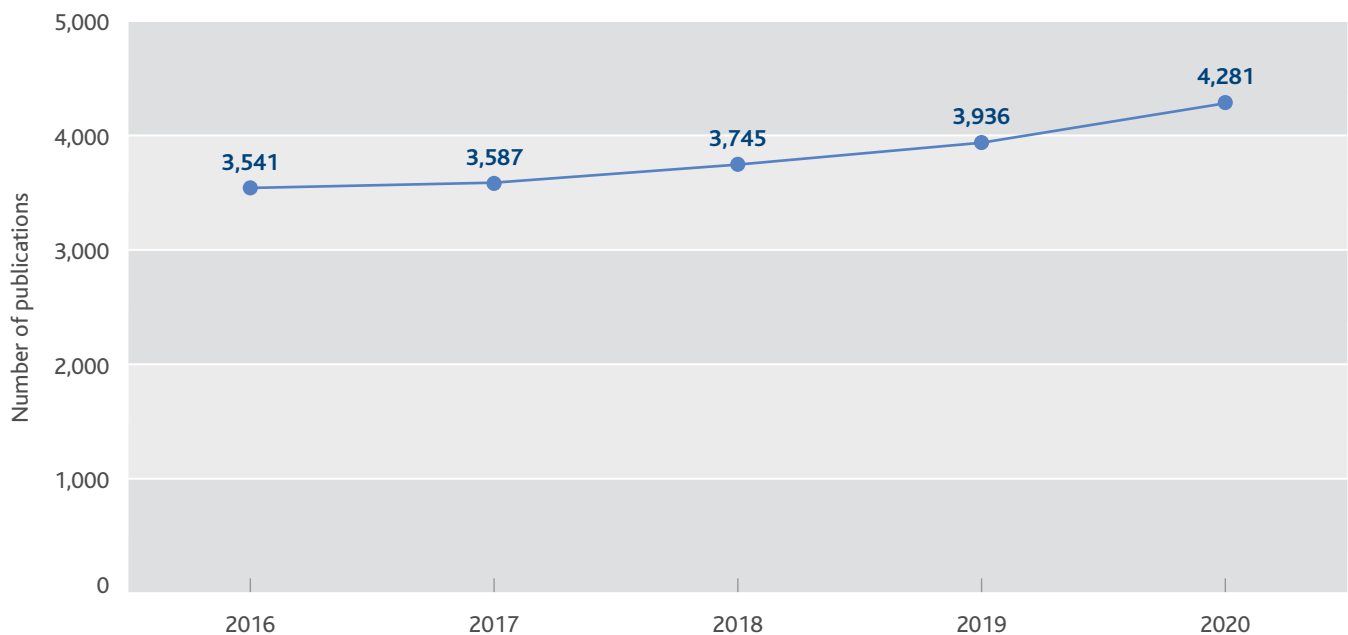
Source: Elsevier Scopus/SciVal (accessed 22 September 2021)

Figure 2: Field-Weighted Citation Impact per 5-year period
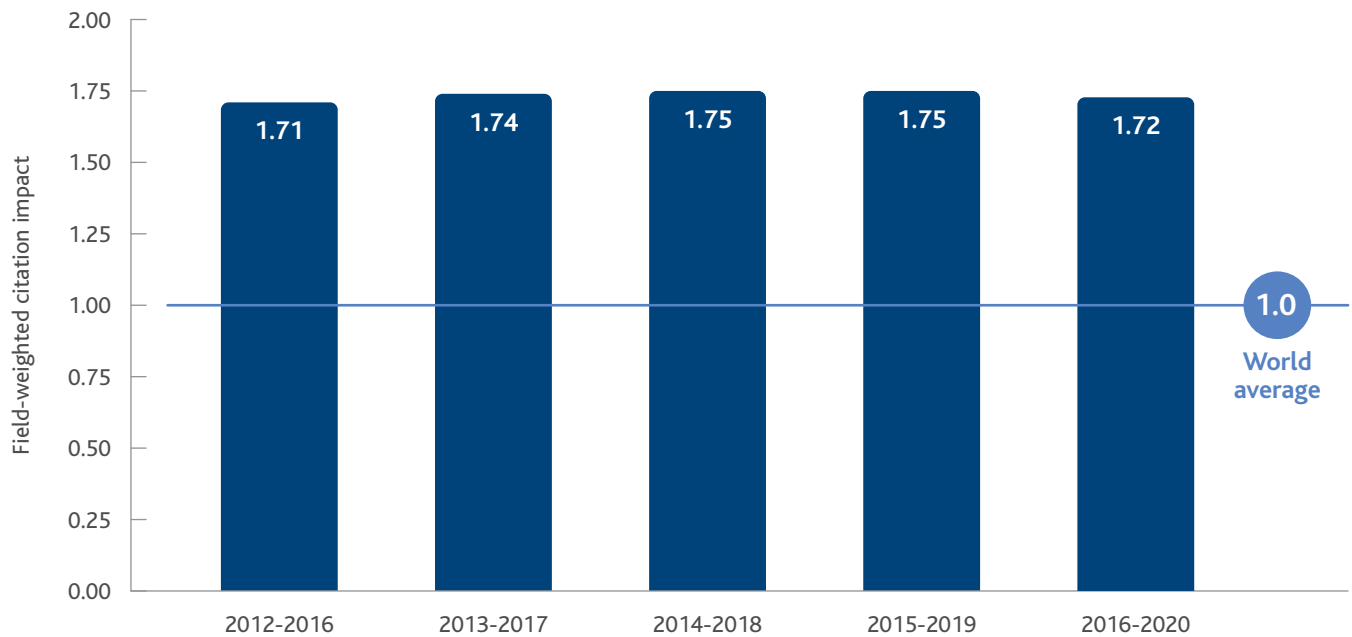
Source: Elsevier Scopus/SciVal (accessed 22 September 2021)

// UCD's publications over the past five years are cited 72% more often than the world average, putting UCD on a similar plane with many other leading international research-intensive universities **//**

Societal Impact

The Research Impact Case Study Competition builds capacity throughout UCD in capturing research impact. It encourages all researchers, regardless of discipline, to consider and celebrate the societal impact of their work.

This competition offers researchers at UCD an opportunity to develop a short written case study, with illustrative images, highlighting the impact of their research to an external, non-specialist audience. Associate Professor Catherine Cox, UCD School of History was winner of the competition in 2020. Her case study, entitled *'Out of sight, out of mind: changing public perceptions of the mental health crisis in Irish prisons'* details the significant impact of her project exploring the history of prisoner mental health. The winning case studies from 2020 can be seen at www.ucd.ie/research/impact including the finalists, shown in Table 6 below.

Prof Wim Meijer, UCD School of Biomolecular and Biomedical Science, and Dr Nicola Fletcher, UCD School of Veterinary Medicine, briefing Minister Simon Harris on the All-Island Wastewater Surveillance for SARS-CoV-2 project.

Table 6: UCD Research Impact Case Study Competition 2020 Runners-Up

Case study	Finalist	Unit
Addressing the stigma faced by people living with obesity	Diabetes Complications Research Centre	UCD School of Medicine UCD Conway Institute
Planning for sustainability through Environmental Sensitivity Mapping	Associate Professor Ainhoa González	UCD School of Geography UCD Earth Institute
Protecting the built environment from the effects of wind	Assistant Professor Jennifer Keenahan	UCD School of Civil Engineering
Reimagining justice and healing after sexual violence	Associate Professor Marie Keenan	UCD School of Social Policy, Social Work and Social Justice
Right technology right time: how the PEARs app is improving pregnancy outcomes	Professor Fionnuala McAuliffe	UCD School of Medicine
Protecting older adults against financial exploitation	Professor Cal Muckley Dr Gaurav Kumar Linh Pham Darragh Ryan	UCD Michael Smurfit Graduate Business School UCD Geary Institute for Public Policy
Reducing the risk of COVID-19 transmission in hospitals	Dr Kevin Nolan	UCD School of Mechanical and Materials Engineering
iSCAPE: improving the smart control of air pollution in Europe	Associate Professor Francesco Pilla	UCD School of Architecture, Planning and Environmental Policy
Promoting women in peace mediation across the island of Ireland	Dr Heidi Riley	UCD School of Politics and International Relations UCD Institute for British-Irish Studies

UCD Strategic Research Priority Areas – Key Highlights

At UCD, our research makes a difference. We deliver research and innovation at scale and in areas of national and global significance by prioritising excellence and impact, investing in our people and providing a culture and environment in which they are supported to deliver across the University's four strategic themes:

1. Creating a Sustainable Global Society
2. Transforming Through Digital Technology
3. Building a Healthy World
4. Empowering Humanity

UCD has an impressive record of leadership and achievement aligned with these themes and now aims, with the help of the Research Partners team, to advance the research under each in a unified manner.

Creating a Sustainable Global Society

Researchers across every discipline are seeking solutions to the world's most pressing challenges, from transitioning to sustainable energy, building secure food systems to addressing climate change.

Major Campaigns

Agriculture and food systems providing healthy and safe food are under threat like never before. National food systems are not managed in a fully integrated way and remain unoptimised. The grand challenge for the world is to produce healthy, safe, nutritious food with full transparency using sustainable systems along the full chain.

The Food Integrity campaign (Food-I) consolidates food systems expertise on the island of Ireland, bringing together key academic, industry and government stakeholders to realise a step-change in the sustainability, security, harmony and integrity of the Irish food system with a view to ensuring healthy, safe, nutritious food. Adopting a consumer-driven, plant food approach, the role for plant food will be enhanced in the Irish food system, enabled by innovative and disruptive technologies. Food-I will build on Ireland's enviable international reputation as a quality food producer, ensuring consumer health and the economic viability and sustainability of national food systems.

Research Highlights

The UCD-led Farm Zero C Project was awarded an SFI Future Innovator Prize of €2 million under the Zero Emissions Challenge. The project is using Shinagh Farm, Co Cork to study how renewable energy, livestock feed and planting different types of grasses and clovers can boost biodiversity and soil health, while also reducing how much methane gas animals produce. The goal is that the farm will achieve net-zero emissions by 2027, with plans to extend this strategy to a further 5,000 farms within five years.

The iCRAG SFI Research Centre for Applied Geosciences hosted at UCD and involving partners from across the Irish research landscape secured €28 million in Phase Two funding. The funding will drive iCRAG's research in areas that are critical to society and the economy, including: the sustainable discovery of energy resources and raw materials required for decarbonisation; developing Ireland's

wind energy capacity off the east coast; climate change mitigation and adaptation; and securing and protecting groundwater and marine resources.

Professor Fiona Doohan leads the €2.7 million 'Healthy Oats' project – €2.18 million awarded from the European Regional Development Fund as part of the Ireland-Wales Cooperation Programme – in collaboration with Aberystwyth University, Swansea University and Teagasc. The project will work with agricultural communities and stakeholders to promote the health, economic and environmental benefits of growing oats, and also help farmers and industry prepare for the changes pending under the EU Green deal, including reduced use of fertilisers and pesticides.

An Irish team including UCD spin-out ProvEye has secured €250,000 in European funding to develop a new way to map and monitor threatened habitats, using drones and machine learning. The project hopes to help the Irish Government to meet legal EU requirements to protect ecosystems.

Transforming Through Digital Technology
UCD researchers are exploring and combining interdisciplinary approaches and methodologies to digitally revolutionise research across every field from medicine to philosophy.

Major Campaigns
Space research and technology has a long history of positive impacts across multiple sectors and on society. Although Ireland has some track record in space research and is a member of the European Space Agency, there is a wealth of expertise here upon which Ireland has yet to capitalise. UCD has significant multidisciplinary strengths in this area, which offers a unique opportunity to position UCD at the forefront of developing the Irish space sector and as leader of a national centre of space research. Building on these strengths, the UCD Centre for Space Research

Board member of the new UCD Centre for Quantum Engineering, Science and Technology and Chief Technology Officer of UCD and Silicon start-up Equal 1 Labs, Assoc Prof Elena Blokhina was included in the 'Top 51 CTOs Transforming The World of Quantum Tech,' in Quantum Daily online publication in August 2021.

// Globally, Quantum research has grown exponentially over the last 10 years, due in large part to its potential to have transformative impacts across many sectors, where its development will lead to advances in science, industry and society //

(C-Space) has launched a university-wide centre for space-related research, innovation and education. Its purpose is to build national and global partnerships that advance the use of space to address global scientific and societal challenges, and to deliver major space projects for the benefit of Ireland.

Globally, Quantum research has grown exponentially over the last 10 years, due in large part to its potential to have transformative impacts across many sectors, where its development will lead to advances in science, industry and society. The disruptive nature of this field is recognised nationally and internationally and the significant level of quantum-related expertise within the University provides the opportunity to position UCD at the heart of quantum research in Ireland. In response, UCD has established the UCD Centre for Quantum Engineering, Science and Technology (C-QuEST), which facilitates University-wide activities aimed at understanding, developing and commercialising new quantum technologies.

Research Highlights
UCD C-QuEST launched this August, highlighting the ever-increasing importance of emerging technologies to harness the power of quantum science. The virtual launch event included perspectives from industry, including Director of IBM Research, Dr Ruoyi Zhou, and COO of UCD spin-out Equal1 Labs, Jason Lynch.

Director of UCD C-Space, Professor Lorraine Hanlon was granted an SFI Frontiers for the Future Award for the development and launch of EIRSAT-1, Ireland's first satellite. This CubeSat successfully completed its first month-long Mission Test at the ESA Education Centre in Belgium. The spacecraft was shaken to simulate launch on a rocket and tested in a thermal vacuum chamber which subjects it to extreme hot and cold temperatures in a vacuum environment.

UCD and partners won funding under the third call of the Disruptive Technologies Innovation Fund (DTIF) for CAMEO (Creating an Architecture for Manipulating Earth Observation data). The project will directly address one of the six objectives of the National Space Strategy for Enterprise 2019-2025 by establishing a Space Services Sector – specifically, offering a new approach to accessing international satellite/UAV/Land-based sensor data.

In the data health sector, the 2021 UCD-IBM Annual Research Colloquium was a virtual event (June 2021), 'Innovation Ecosystems in Digital Surgery', highlighting the future of digital surgery in Ireland. The event was streamed and disseminated afterwards on the UCD Research YouTube channel. It also generated a white paper which has been submitted to Government.

Building a Healthy World
Across the Life Sciences/STEM, Humanities, Social Sciences and more, researchers are working to improve the health and well-being of humans, animals and the environment through academic excellence and collaborative research approaches.

Major Campaigns
Potentially one in two people living on the island of Ireland will develop cancer during their lifetime. To help improve the lives of many living with and beyond cancer, there is an urgent need for the development of an all-island cancer research institute to foster greater research collaboration. UCD is currently spearheading an initiative to enable the development of such a centre, with a specific focus on advancing knowledge of the disease, identifying new targets for its diagnosis and therapeutic manipulation, with a view to improving the prognosis for patients in the clinical setting.

Research Highlights
UCD has had significant awards and impacts in COVID-19 research over the last year. The European Commission launched VACCELERATE, a vaccine clinical network to accelerate the trialling of COVID-19 vaccines. Led in Ireland from UCD by Professor Patrick Mallon, the trial platform provides a rapid response single entry point for all stakeholders in vaccine development to kick-start phase two and three vaccine trials. Professor Mallon also co-leads the National Irish COVID-19 Biobank which is a collaboration across six academic institutions and 13 hospitals, spanning adult, paediatric, maternity and community clinical services.

UCD researchers have been involved in numerous clinical studies, some under the direction of UCD's Chair of Critical Care Medicine, Professor Alistair Nichol, who leads national and global drug trials through the Irish Critical Care Clinical Trials Network. Those that published important results include REMAP-CAP, led in UCD by Professor Nichol (on various therapies including Heparin, Hydrocortisone and Tocilizumab), and 'Solidarity,' led in UCD by Professor Cormac McCarthy (including Remdesivir and Hydroxychloroquine). The All-Island Infectious Disease Cohort study, led in UCD by Professor Patrick Mallon, mapped the first and second wave of COVID-19 infection in Ireland.

Over 30 UCD research projects were funded through the Irish Government's COVID-19 Rapid Response calls. Some of the projects funded in 2021 included: 'All-island wastewater surveillance for SARS-CoV-2', led by Professor Wim Meijer and 'Accelerating antiviral treatments with novel virus-host interface strategies', led by Dr Virginie Gautier.

UCD is leading a new €21 million EU- (Innovative Medicines Initiative) and Industry-funded Psoriatic Arthritis research project, entitled 'Hippocrates,' with an international team of 26 research partners, pharmaceutical companies, SMEs and patient organisations. Hippocrates is jointly coordinated by UCD Conway Institute Fellows Professor Oliver FitzGerald and Professor Stephen Pennington, both UCD School of Medicine.

Empowering Humanity
Encompassing almost any discipline, researchers are addressing societal challenges through research that enables inclusive processes, shapes human thought and motivates lasting behavioural change.

// UCD is leading a new €21 million EU- (Innovative Medicines Initiative) and Industry-funded Psoriatic Arthritis research project, entitled 'Hippocrates,' with an international team of 26 research partners, pharmaceutical companies, SMEs and patient organisations **//**

Major Campaigns
Researchers at UCD, working across the broad spectrum of arts, humanities, social sciences, law and business underpin the aforementioned campaigns. Emergent campaigns under the 'Empowering Humanity' theme include 'Secure and Democratic Societies', exploring the use of humanities approaches to violence and society, migration, participatory democracy, Irish foreign security and defence policy, data security and disinformation; and 'Sustainable Communities,' focussing on a range of interlinked areas integral to how we live and work in a post-pandemic era, particularly addressing the vibrancy of Irish towns, housing policy, homelessnes and obsolete buildings.

Research Highlights
Associate Professor Francesco Pilla, UCD School of Architecture, Planning and Environmental Policy along with Associate Professor Jennifer Symonds, UCD School of Education were awarded €285,796 through the SFI Future Innovator Prize programme, the Plastics Challenge. Their project 'Plastic Raiders' uses an augmented collective intelligence framework where citizens' deliberation processes around plastic use are supported with artificial intelligence, technology and educational tools.

Professor Kathleen James-Chakraborty, UCD School of Art History and Cultural Policy and UCD Humanities Institute, has been awarded a €2 million Advanced Grant by the European Research Council (ERC) to explore how women and members of ethnic minorities have shaped modern architecture and design. She is one of four researchers in Ireland to receive the prestigious funding award this year.

UCD received two awards under the Irish Research Council and UK Arts and Humanities Research Council (AHRC) partnership to fund world-leading expertise in the digital humanities. Dr Neil Carlin, UCD School of Archaeology and Dr Seren Griffiths, Manchester Metropolitan University, were awarded for 'Project Radiocarbon – Big Data, integrated cross-national heritage histories.' Dr Claas Kirchhelle, UCD School of History and UCD Centre for the History of Medicine in Ireland, and Dr Samantha Vanderslott, University of Oxford, were awarded for 'Typhoid, Cockles, and Terrorism: The turbulent history of Anglo-Irish typhoid control in revolutionary Dublin'.

There have been several prestigious appointments associated with this theme, including: Dr Orla Murphy, appointed to the EU New European Bauhaus high-level roundtable, an initiative and advisory committee launched last year; Professor David Farrell, elected as

Dr Suja Somanadhan, UCD School of Nursing, Midwifery and Health Systems and PI on COVID-19 COVISION project and Prof Alistair Nichol, UCD Chair of Critical Care Medicine and Director of the Irish Critical Care Clinical Trials Network, meet Minister Simon Harris and Prof Orla Feely, Vice-President for Research, Innovation and Impact.

the next Chair of the European Consortium for Political Research; Professor Andreas Hoepner and Dr Theodor Cojoianu (visiting Fellow), appointed to the EU Commission Platform on Sustainable Finance; and Associate Professor Karen Anderson appointed as Chair of the Council for European Studies (CES).

Emeritus Professor Gabriel Cooney, UCD School of Archaeology, has been awarded an Honorary OBE in recognition of his services to heritage as Chair of the Historic Monuments Council for Northern Ireland.

UCD Research Institutes

In addition to contributing across the University's four strategic themes outlined above, UCD's Research Institutes deliver cross-cutting programmes and events to further enhance the knowledge base, research ecosystem and impact of UCD, some of which are outlined below.

UCD Conway Institute for Biomolecular and Biomedical Research

The strategy for health research at UCD centres on connected health and personalised medicine. These platforms have the potential to transform our healthcare systems and create world-leading impact across a range of disease areas, and this is reflected in UCD Conway Institute's research themes. Fellows of the Institute have contributed to research mentioned elsewhere in this report — including Professor Oliver Fitzgerald and Professor Stephen Pennington (Hippocrates) and Professor Patricia Maguire and Professor Fionnuala Ní Áinle (AI-PREMie).

In Public Engagement and Outreach, the Patient Voice in Cancer Research initiative, led by Professor Amanda McCann, documented its development in a new publication, launched a dedicated website and held a series of monthly Zoom discussions attended by over 500 patients, advocates and researchers.

Transition Year (TY) students from schools in Dublin, Kildare and Wicklow participated in a week-long schedule of activities and seminars to gain insight into life as a scientist. Eleven PhD students and postdoctoral staff helped to design and deliver the programme, which ran in April 2021. This pilot week will shape three further TY weeks funded through the SFI Discover programme for pupils from DEIS schools linked with UCD.

Managing through COVID-19, Institute staff maintained essential infrastructure and undertook extensive planning and documentation to implement COVID-19 policies and pod structures for the orderly resumption of research from June 2020. These policies served as templates for other units. This early return to essential research ensured successful funding applications for COVID-19 related research, including those of Professor Denis Shields, Professor Wim Meijer, Professor Patricia Maguire, Dr Virginie Gautier and Dr Nicola Fletcher.

Professor David Brayden was appointed to one of Ireland's first National Research Ethics Committees by Minister for Health, Stephen Donnelly, to address the area of clinical trials of medicinal products for human use and clinical investigations of medical devices. This will support the development of a robust ethical framework and strengthen Ireland's position as a global hub for MedTech R&D.

L-r: Prof Mary Higgins, UCD School of Medicine/National Maternity Hospital, Prof Fionnuala Ní Áinle, Prof Patricia Maguire and Dr Paulina Szklanna, UCD ConwaySPHERE and AI-PREMie research group. (Photo by Fran Veale)

UCD Institute for Discovery

UCD Institute for Discovery continues to be a linchpin of connectivity, expertise and support for emerging and early stage interdisciplinary research in the University. On 24 September 2020, the Institute launched the AI Healthcare Hub, whose mission is to put impactful algorithms into production on a number of exciting projects, including risk stratification tools for COVID-19, preeclampsia and multiple sclerosis (MS). The launch event included a webinar entitled 'The Future of AI in Healthcare,' featuring expert speakers and panellists from academia and industry, and co-hosted in partnership with the Analytics Institute of Ireland and in association with UCD Research and Innovation.

AI in health projects that gained funding in the last year included AI-PREMie (Reducing the Burden of Preeclampsia), AI-PredictMS and COVID COCOON. AI-PREMie, led by Professor Patricia Maguire, was awarded €500,000 as runner-up of the SFI Future Innovator Prize, Artificial Intelligence for Societal Good Challenge.

In November 2020, following a comprehensive proposal submission and presentation, the Institute was awarded full membership of the prestigious University Based Institutes of Advanced Study (UBIAS) Network. UBIAS is an international organisation which brings together over 40 research-intensive universities worldwide, including four of the top 10 and 16 of the top 100 globally ranked universities.

Over the last year, the Institute has virtually hosted over 40 eminent speakers from leading institutions and businesses across the globe, including the Scripps Institute, La Jolla, Boston College,

CitiBank and Microsoft, through their innovative 15-minute 'Zoom for Thought' interview series – running weekly since April 2020.

The Institute partnered with Intel on the Intel Laser Harp project, which was showcased at the UCD Festival in May 2021. Also in May, the Institute, in collaboration with UCD Energy Institute, supported the Dublin Climate Dialogues conference (see UCD Energy Institute below).

UCD Earth Institute

UCD Earth Institute is the University's Institute for environmental and sustainability research, with over 140 academic members, combining relevant expertise from all six Colleges and 24 Schools. The Institute also has an active associate member community of over 250 postdoctoral and postgraduate researchers, research and technical support staff, and a newly established committee to support these cohorts chaired by Dr Aparajita Banerjee, UCD College of Business.

In 2021, the Institute established the new research theme 'People, Work, Society' led by Dr Margaret Crean, Professor Donna Marshall and Dr Penelope Muzanenhamo. The research theme aims to explore issues including fairness and equality, decent work and working conditions and just transition. Three new strategic priority projects were launched in 2021, exploring environmental well-being, mountain research and biocrops.

The project 'Centre for Irish Towns' (launched in 2019) was formally approved as a UCD Centre for Research and Training and held a launch event in June 2021. Directors Dr Philip Crowe and Orla Murphy are members of the Advisory Group to

the interdepartmental group tasked with developing a 'Town Centre First' policy as one of the actions of the Programme for Government. The policy is expected to be launched by Government in late 2021.

Associate Professor Geertje Schuitema was part of an expert advisory group chaired by the Institute's Director Professor Tasman Crowe, to advise Government on the expansion of Ireland's network of Marine Protected Areas. Professor Crowe has also been appointed chair of the National Biodiversity Forum which will help shape the next National Biodiversity Action Plan.

This year, the Institute launched its new three-year strategy, 'Towards a Sustainable Future,' with an online event exploring interdisciplinary and intersectoral partnerships in environmental and sustainability research. In line with the aims of the new strategy, the Institute has established new strategic collaborations and partnerships with a range of organisations including Future Earth Ireland, the Environmental Protection Agency, the Environmental Sciences Association of Ireland and the World Universities Network, and is a founding member of the new All-Island Climate and Biodiversity Research Network.

UCD Earth Institute also led UCD's application to join the United Nations Academic Impact (UNAI) initiative. With over 1,400 member institutions across 147 countries, UNAI encourages universities to address global challenges through teaching and research and to act as incubators for new solutions to achieving the UN Sustainable Development Goals.

UCD Energy Institute

UCD Energy Institute's multidisciplinary team of researchers are focused on the transition to a net zero carbon future and making Ireland a global leader in the energy transition.

Modelling approaches developed through ESIPP (Energy Systems Integration Partnership Programme) have highlighted the technical challenges facing grid operations of increasing shares of renewable power, and have directly influenced important actions to progress decarbonisation.

A recent example of this is ESB's 'Green Atlantic' Project at Moneypoint Power Station, Co Clare. The multi-billion Euro programme of investment brings together offshore wind, renewable energy enabling technology and green hydrogen production. It will contribute significantly to achieving the Government's target of 51% reduction in emissions by 2030. Work has already begun on a synchronous compensator – the largest of its kind in the world – which will provide a range of services to the grid previously supplied by thermal power stations. Energy system modelling research by the UCD team has identified the compensator's role in supporting decarbonisation of the Irish grid, which is critical in Ireland's climate action steps.

In the past year, the Institute has demonstrated international leadership in supporting and steering the Dublin Climate Dialogues Conference (May 2021). Over two days, attendees heard from experts in the fields of climate change, green finance, energy and technology, on how individual countries and the global community can accelerate the transition to net zero ahead of COP26 (UN Climate Change Conference) in Glasgow in November. Keynote speakers included John Kerry, US Special Presidential Envoy for Climate; Fatih Birol, Executive Director, International Energy Agency; and Mary Robinson (former President of Ireland). Other leading figures from industry, academia and government also participated, including Professor Andrew Keane, UCD Energy Institute Director, moderating two sessions in the conference, on 'Technologies and Resources for Decarbonisation' and 'Energy Systems to Facilitate Decarbonisation.'

UCD Institute of Food and Health

UCD Institute of Food and Health continues on its mission to be a global leader in future-proofing food systems, with a holistic approach to health. Its extensive membership, which brings together over 200 highly-skilled facuty and students across multiple disciplines, continue to grow their international networks and deliver world-class, pioneering research.

The Institute is in the final stages of selecting a candidate for the UCD – University of California Davis International Innovator Fellowship. The Fellow will travel to California to work with a research group at UC Davis and a venture capital partner in Silicon Valley.

The expertise of the Institute's PIs was recognised through the following appointments: Professor Eileen Gibney to the EUFIC General Assembly; Professor Tom Curran and Dr Fionnuala Murphy to the International Energy Agency Task 36 group; Professor Tommy Boland to the IFA SmartFarming Steering Committee; Professor Lorraine Brennan to the US National Academies Standing Committee; Professor Frank Monahan and Professor Eileen Gibney to the safefood Scientific Advisory Committee; and Professor Dolores O'Riordan and Professor Shea Fanning to the FSAI Scientific Committee. Adjunct Professor Tom Arnold was appointed as the Government of Ireland's Special Envoy on Food Systems.

Professor Paula Bourke, Professor Colm O'Donnell and Associate Professor Nigel Bruton were named among the top 1% most highly cited researchers listed by Clarivate analytics for 2020 – the fourth year in a row Professor O'Donnell was included in the list.

Managing through the pandemic, the Institute moved its outreach and public engagement events online during 2020, including its popular Nutrition and Health Public Lecture series. Over 1,000 people attended the webinars throughout the year, with the lecture by Professor Helen Roche, Director of UCD Conway Institute, on the topic of 'Nutrition and Healthy Immune Function' proving most popular. The video of the talk also attracted more than 900 views on YouTube.

Professor Shea Fanning, Professor Aoife Gowen and Professor Fiona Doohan all received SFI COVID-19 Rapid Response funds for projects including: Understanding and preventing outbreaks in meat processing plants; Improving PPE; and FoodShield: Helping Ireland's Agri-Food sector to bounce back.'

UCD Geary Institute for Public Policy

Following a very successful five-year tenure as Institute Director, Professor Philip O'Connell retired this year. He was replaced by longstanding Institute Fellow Professor Michelle Norris, who is one of Ireland's leading experts on housing and urban policy.

150,687

downloads on Soundcloud and iTunes as of early August 2021 of 'Our Authors' series of podcasts from UCD Humanities Institute

The Institute supported significant research funding capture during the year. Monica O'Connor and Ruth Breslin, UCD School of Social Policy, Social Work and Social Justice received funding for the Sexual Exploitation Research Programme (SERP) from Community Foundation for Ireland. Dr Lorenzo Cini, with the support of Professor Roland Erne, received a Marie Skłodowska-Curie Action award for 'Contesting Governance by Numbers: The Mobilizations of Food Delivery Couriers across Europe in Time of the Pandemic' (COGONU).

Associate Professor Jennifer Symonds, Dr Seaneen Sloan and Dr Laura Taylor were funded by the Department of Children, Equality, Disability, Integration and Youth to conduct 'A scoping review to inform the development of a potential new birth cohort for Growing Up in Ireland'. The European Strategy Forum on Research Infrastructure (ESFRI) funded the team to participate in the establishment of Europe's first cross-national birth cohort study entitled 'Growing Up In Digital Europe' (GUIDE). And they join Associate Professor Orla Doyle in the €5 million Horizon 2020 'COORDINATE' project – the first ever Europe-wide birth cohort longitudinal study to track children's well-being as they grow up.

Institute Fellows established a new programme of research skills workshops for 2020/21. Three workshops were run which focused on: Methods – delivering training in advanced research techniques and methodologies; Skills – focusing on professional development and targeted particularly at early stage researchers; and Tools – providing training on research software programmes. These attracted a very strong attendance and will be extended in 2021/22.

The Institute's regular weekly seminar series continued to run online during the pandemic. Publicpolicy.ie published over 50 policy papers, with those on Government responses to COVID-19 and Institutional Investment in Irish Housing covered extensively in the print media. Readership rose by 40% in 2020/21, with almost half from the public policy sector.

UCD Humanities Institute

Now in its twentieth year, UCD Humanities Institute is a pivotal centre for inter and multidisciplinary humanities research in Ireland. This year, the Institute published its five-year report UCD *Humanities Institute 2016-2021: Achievements and Challenges,* which is available at www.ucd.ie/humanities.

In April 2021, Professor Kathleen James-Chakraborty MRIA, UCD School of Art History and Cultural Policy was awarded an ERC Advanced Grant of €2 million for her project on the role of women and ethnic minorities in modern architecture. As PI of the HI-funded project 'Modern Architecture and Culture in the mid 20th Century: From Exporting to Importing the New,' she advanced the methodological frames through which we understand modern architecture. Her ERC project builds on this and explores how women have globally shaped modernist architecture.

Professor Finola O'Kane Crimmins MRIA, UCD School of Architecture, Planning and Environment Policy and PI of the HI-funded project 'Ireland and the Caribbean: Comparative Perspectives', is one of the foremost historians of Atlantic slavery's spatial history and legacy. In 2020, she produced the RIA podcast on 'Detachment: The Bellfield Plantation' and in May 2021, she contributed to an RTÉ Nationwide programme on 'Ireland and Slavery'. She also serves on the Advisory Committee for Trinity College's Colonial Legacies initiative.

The Wellcome Trust project 'Framing Ageing: A Clinical, Cultural, and Social Dialogue', with PI Professor Anne Fuchs, promotes methodological exchange between gerontologists, humanities researchers, social scientists, and practitioners. Between June 2020 and May 2021, the Institute ran six public webinars with over 800 registrations from all over the world. Podcasts can be found at framingageing.ucd.ie

In November 2020, the Institute's 'Transnationalising the Humanities' research strand ran a webinar with the Institute of Modern Languages Research, University of London on 'Theorizing crisis imaginaries in response to the frenzied mediatization of COVID-19 news stories,' which attracted over 600 registrations.

Institute podcasts on Soundcloud, iTunes, Spotify and YouTube facilitate global impact. In 2020, they rolled out the 'Our Authors' series for members and postdocs to discuss their research in an accessible format – achieving a total of 150,687 downloads on Soundcloud and iTunes as of early August 2021.

Innovation

UCD is committed to its key role in Ireland's innovation and knowledge exchange ecosystem as an enabler of economic growth and as a contributor to economic, cultural and social development. Comparing the last 4-year period with the previous one, NovaUCD has increased the quality and quantity of spin-out companies. The number established has doubled while the seed funding secured by spin-outs has more than tripled in the same period. This was achieved through the attraction of external CEOs, enhanced acceleration programmes, and better engagement with investors.

This year also saw NovaUCD establish several new partnerships with innovation hubs in Ireland and internationally to expand its reach further in supporting and developing start-ups with global potential. NovaUCD has become a member of the ESA Space Solutions Centre Ireland consortium. The consortium, funded by ESA and Enterprise Ireland, is focused on supporting entrepreneurs and start-ups with innovative technology in sectors as diverse as agri-tech, data analytics, bee husbandry, architecture and med-tech, in addition to the space sector. The supports include grants up to €50k, workshops and mentoring.

NovaUCD is partnering with IADT Media Cube to deliver a series of New Frontiers Programmes, over the next five years, with €1.6 million in funding from Enterprise Ireland. The programmes will be aimed at the growing number of emerging entrepreneurs based in the greater South Dublin and North Wicklow regions.

The NovaUCD/IADT Media Cube New Frontiers programme will provide participating entrepreneurs with access to a comprehensive package of supports, including mentorship, from some of Ireland's leading business people, funding support from Enterprise Ireland and access to resources including desk space facilities from two of Ireland's leading business innovation centres.

The partnership will enable a total of 275 entrepreneurs, up to 55 annually, to develop their innovative business ideas with a view to building globally scalable businesses.

NovaUCD has also been selected as a global strategic partner on Berkeley SkyDeck, UC Berkeley's start-up accelerator programme. SkyDeck's global strategic partners are universities and accelerators from around the world who help identify top start-ups to participate in the SkyDeck accelerator. NovaUCD is SkyDeck's only Irish global strategic partner and NovaUCD coached and recommended three start-ups for SkyDeck's Winter 2021 accelerator programme.

In addition SVG Ventures | THRIVE, a leading global Agri-Food Venture and Innovation Platform headquartered in Silicon Valley, announced AgTechUCD, which is part of NovaUCD, as the Irish partner on the THRIVE Europe Challenge programme, which is focused on Agri-Food tech start-ups, to help drive awareness among the Irish and European AgTech community.

Response to COVID-19

Responding to the repeated lockdowns and Government guidelines over the past year, NovaUCD continued to deliver client engagement programmes online and to expand its programme of events.

Overall, NovaUCD ran 44 online events, on average four per calendar month, during the last year. Engagement grew during this period with up to 300+ registrations regularly received for NovaUCD Start-Up Series events. The delivery of digital and virtual programmes enabled the participation of higher numbers of students, researchers and entrepreneurs.

NovaUCD also developed a new client digital repository. This is a self-service resource that contains important information on start-up awards and competitions, open calls for partner discounts, NovaUCD approved professional service providers and recordings and audio files for all online events. This initiative has been very well received by client companies and has enhanced the level of support NovaUCD clients receive and will be maintained in the post-pandemic environment.

Update on Recent/New Initiatives

The NovaUCD Mentors and Business Partners Network has continued to grow, the network now has 140 members. The commercial and professional members provide mentoring and advice to students and researchers who are seeking to develop start-up ideas at the early stage and in several cases collaboration develops into partnerships with members becoming investors and executives in the maturing start-up businesses.

The collaboration between NovaUCD and the UCD Michael Smurfit Graduate School of Business has developed further and during the summer 8 students from the MSc in Management Consulting joined 8 start-up teams to participate in the NovaUCD Customer Discovery Programme. Each student was assigned to a start-up team and worked through a series of structured modules managed and delivered by NovaUCD, during which the student gathered market data, researched target customers and executed a digital marketing campaign to promote the services of the start-up and gain interest in product trials.

During the year 9 candidates were selected for the KT Scouts Initiative which this year had a focus on the digital economy. There was a broad range of participation with Scouts coming from

// NovaUCD is partnering with IADT Media Cube to deliver a series of New Frontiers Programmes, over the next five years, with €1.6 million in funding from Enterprise Ireland //

L-r: Ann Marie Phelan, Enterprise and Innovation Manager, IADT Media Cube; Tom Flanagan, Director of Enterprise and Commercialisation, NovaUCD; and Paula Carroll, National Programme Manager, New Frontiers, Enterprise Ireland; announcing the NovaUCD and IADT Media Cube partnership to deliver a series of New Frontiers Programmes over the next five years.

across the University. In addition to internal training provided by Dr Stephen Donoghue, external training was also provided on a range of issues, including Open Source Software and Licensing, IP and the Digital Economy, the Circular Economy and Digital Transformation, Biotechnology Patents and Software Patents.

The COVID-19 pandemic had a significant impact on the networking capacity of the Scouts, and this made the acquisition and reviews of inventions more challenging for them. Nevertheless, six inventions were submitted associated with the work and assistance of the Scouts. One of these is now the subject of a patent filing and a licence negotiation.

Atlantic Bridge University Fund II

During the year Atlantic Bridge announced the launch of the University Bridge Fund II, an €80 million fund focused on scaling and commercialising extensively validated research from Ireland's third-level institutions into the next generation of deep tech companies with global potential.

The fund is a unique partnership between Atlantic Bridge, UCD, TCD and UCC to accelerate the commercialisation of world-class science and to globally scale the companies formed. At least 50% of the investments made by the fund will go to UCD, UCC and TCD spin-out and spin-in companies.

The Fund follows on the path of first University Bridge Fund from 2016 which has invested in over 30 deep tech companies, 6 at NovaUCD, that have raised over €220 million in co-investment to date. Fund I portfolio companies attracting significant international investment include Equal1, Ireland's first quantum computing company and a UCD spin-out, along with Manna, the drone delivery start-up, both of which are headquartered at NovaUCD.

Commercialisation of Research Outputs

Through UCD's knowledge transfer team based at NovaUCD, researchers from UCD and the National College of Art and Design are assisted with the identification and protection of intellectual property (IP) arising from research programmes and extending to the commercialisation of IP through licensing to companies and through the formation of spin-out companies.

During the year researchers reported a total of 65 inventions. In addition 14 priority patent applications were filed by UCD across areas of agriculture and food, energy, engineering, environment, information and communication technology, life sciences and veterinary medicine. Twenty-eight licence agreements were also concluded by UCD with a range of indigenous and international companies.

Six new UCD spin-out companies, Cerebro R&D Ltd, CropBiome Ltd, Fionnachtain Inc., Joyst Instruments Ltd, SeamlessCare Ltd and TOAD R&D Ltd were also incorporated during the year.

Cerebro R&D Ltd was established to develop personalised medicine approaches for mental health based on proprietary brain organoid models. The founders of the company are Professor Keith Murphy and Associate Professor John Crean, UCD School of Biomolecular and Biomedical Science and Dr James Linden.

CropBiome Ltd is developing endophytes to increase crop yields from seeds. The founders of the company are Professor Fiona Doohan, UCD School of Biology and Environmental Science with Professor Trevor Hodkinson and Dr Brian Murphy, TCD.

Dr Donal MacKernan, UCD School of Physics, has developed a disruptive molecular switch platform technology using rational design and computer simulation, and which has a wide variety of applications. The technology has been licensed through NovaUCD to Fionnachtain Inc, a US-registered company recognised as a UCD spin-out, as a point-of-care medical diagnostic for COVID-19 and influenza.

Joyst Instruments Ltd was established to commercialise the Joyst JV-1, a new style of MIDI instrument that provides an array of gamer-style thumb joysticks to give more expressive possibilities for electronic musicians. The JV-1 has resulted from a ME thesis project carried out by Philip Snell under the supervision of Dr Paul Cuffe, UCD School of Electrical and Electronic Engineering. They co-founded the company together with UCD ME graduates, William Langrell and Edward Byrne.

SeamlessCare Ltd is developing a digital care platform to improve the life of people with intellectual disability, dementia and a range of complex needs as well as those who care for them. The founders of the company are Dr Aviva Cohen, Ian Kennedy and Dr Cagri Cubukcu from the UCD School of Mechanical and Materials Engineering.

TOAD R&D Ltd (t/a Alvarius Pharma Ltd) was established to develop the use of psychedelic substances in the treatment of mental disorders. The founders of the company are Professor Keith Murphy, UCD School of Biomolecular and Biomedical Science, Professor David Nutt and Dr James Linden.

ConsultUCD

ConsultUCD, the University's managed consultancy service, provides advice and support to all academics that are interested in sharing their knowledge and expertise with external organisations via consultancy. Consultancy pursued through ConsultUCD delivers societal and economic benefit to clients who gain from UCD's world-class knowledge and insight.

In the last year ConsultUCD has supported more than 60 academics who are engaged with all types of external organisations including multinationals, Irish start-ups, Government bodies and agencies and international universities. Projects range from half days to multi-year arrangements and span the breadth of expertise across campus. Some examples of projects carried out this year include:

- Assistant Professor Sarah Cotterill, UCD School of Civil Engineering, was awarded a tender by An Fóram Uisce to develop a framework for improving domestic water conservation in Ireland.
- Associate Professor Niamh Moore-Cherry, Associate Professor of Urban Governance and Development in the UCD School of Geography, was successful in winning a tender from the National Economic and Social Council to develop and implement a place-based research project on the opportunities and challenges to increasing economic and environmental sustainability for rural communities across the island of Ireland.
- ConsultUCD, as part of a consortium, were awarded innovation funding from the Horizon Europe EIT HEI INITIATIVE for Innovation Capacity Building for Higher Education. The successful

epiCaPture, an early-stage start-up emerging from UCD School of Biology and Environmental Science, which is developing a novel urine DNA test for aggressive prostate cancer was named overall winner of the 2020 UCD VentureLaunch Accelerator Programme. Team members are Dr Antoinette Perry (pictured), Asia Jordan, Adele Connor, Ross Nelson and Edward Simons.

project, RiEcoLab, aims to develop a framework to enable higher education institutions to accelerate their innovation and entrepreneurial capacity with the involvement of all stakeholders; academic and non-academic staff, as well as students.

Partnering with Industry

UCD has a strong track record of working with industry and seeks strong and strategic engagement with business and with social and cultural enterprises; adding value, expanding networks and exploring new opportunities to deliver impact through partnership.

Our innovation ecosystem includes large-scale industry collaborative programmes such as SFI-funded Centres and Strategic Partnerships, and Enterprise Ireland-funded and industry-led technology centres.

Over 60 companies, ranging from early-stage high-tech start-ups to established innovation-led companies, are now located at UCD at any one time. These companies, which cover sectors from agriculture and food to life sciences to ICT to physical sciences, engineering and cleantech, are primarily based at NovaUCD or NexusUCD, the Industry Partnership Centre, or have located elsewhere on campus in order to collaborate more closely with UCD.

During the year it was announced that UCD is partnering in 7 of the 29 projects which secured funding under the third round of the Disruptive Technologies Innovation Fund. The UCD related projects, which involve partnering with other third-level institutions, industry and start-ups are receiving a total of €22.3 million over three years.

NovaUCD Support Programmes

The NovaUCD team also supports researchers in the commercialisation of IP outputs through a series of training programmes including the Commercialisation Bootcamp and the VentureLaunch Accelerator Programme. NovaUCD also supports the development of student entrepreneurial talent through the BT Young Scientist Business Bootcamp and the NovaUCD Student Enterprise Competition.

UCD Commercialisation Bootcamp

Participants on this year's Commercialisation Bootcamps represented a total of 10 potential commercial projects emerging from research taking place at UCD. The overall aim of the bootcamps is to strengthen the pipeline of commercial opportunities arising from programmes. This year's bootcamps held in November and February were successfully delivered online via Zoom due to the COVID-19 pandemic.

epiCaPture Wins 2020 UCD VentureLaunch Accelerator Programme

epiCaPture which is developing a novel urine DNA test for aggressive prostate cancer, has won the 2020 UCD Start-Up of the Year Award. The epiCaPture test measures six epigenetic biomarkers which are indicative of aggressive disease, using a widely available PCR platform.

epiCaPture won the Award, and a €32,000 prize fund, after being declared overall winner of the 2020 UCD VentureLaunch Accelerator Programme, which is run by NovaUCD. The aim of the annual programme, which this year took place virtually as did the awards

event due to COVID-19, is to support the creation and launch of sustainable and profitable new start-ups emerging from the University.

The members of the epiCaPture team, an early-stage venture emerging from the UCD School of Biology and Environmental Science are Dr Antoinette Perry, Asia Jordan, Adele Connor and Ross Nelson, along with Edward Simons, a chartered accountant and former investment banker.

2020 BT Young Scientist Business Bootcamp

The aim of the BT Young Scientist Business Bootcamp, delivered annually by BT in partnership with UCD, is to bridge the gap between education and business for students who demonstrate entrepreneurial flair and business acumen.

Now in its twelfth year, the innovation and skills camp, held online this year due to COVID-19, involved 30 second-level students from

23

participants took part in year's NovaUCD Student Enterprise Competition which was held virtually due to COVID-19

across Ireland who demonstrated an ability to understand how and why a simple idea can be developed into a commercially viable enterprise. The format of the bootcamp changed this year in line with pandemic restrictions, and involved a varied line-up of content experts and guest speakers who shared their experiences of taking their science project into the commercial world.

2021 NovaUCD Student Enterprise Competition

The NovaUCD Student Enterprise Competition, an intensive 4-week mentoring programme for student entrepreneurs, took place during the year. The programme is now in its seventh year and is run by NovaUCD as a framework to support undergraduate and postgraduate students who want to work together to develop and grow start-up companies.

Application numbers for this year's programme were up 100% from last year and notably close to 50% of applicants were female students. A total of eleven early-stage student ventures and 23 participants took part in year's competition which was held virtually due to COVID-19. Over 50 early-stage ventures and over 120 students have completed the NovaUCD Student Enterprise Competition over the last 7 years.

Following a series of pitches to a panel of judges, EOFIS, which is developing a software platform to augment human memory, was declared overall winner and won a €5,000 cash prize.

The members of the EOFIS team are Marysol Angeloni, who is completing an MSc in Management at the UCD Michael Smurfit

Pictured at NovaUCD are EOFIS team members, Marysol Angeloni and Tiarnach Ó Riada, overall winners of the 2021 NovaUCD Student Enterprise Competition.

Pictured at UCD Lyons Farm announcing the launch of the new AgTechUCD Agccelerator Programme are: Shane Whelan, agri-strategist, AIB; Nicky Deasy, Managing Partner, The Yield Lab Europe; Niamh Collins, Manager, AgTechUCD Innovation Centre; and James Maloney, Senior Regional Development Executive, Enterprise Ireland.

Graduate Business School, and Tiarnach Ó Riada, who has completed his BEng degree in the UCD School of Electrical and Electronic Engineering.

Two other participating start-ups, RespTech and FlowMo, were announced as second and third place winners and received €3,000 and €2,000 cash prizes respectively.

The sponsors of the 2021 NovaUCD Student Enterprise Competition were AIB, Arthur Cox, Deloitte, Ericsson, Goodbody Stockbrokers and Xilinx.

AgTechUCD Innovation Centre

AgTechUCD, based at UCD Lyons Farm and part of NovaUCD, is focused on accelerating the launch and scaling of AgTech and FoodTech start-ups in Ireland and has been funded through the Regional Enterprise Development Fund administered by Enterprise Ireland.

During the year AgTechUCD announced the launch of a new accelerator programme dedicated to early-stage AgTech and FoodTech start-ups. The AgTechUCD Agccelerator Programme is an intensive 12-week programme, which includes dedicated business development workshops and investor readiness training, mentoring from AgTech and FoodTech experts and business advisors, guest speakers and facilitated introductions to AgTechUCD's venture capital and business angel networks.

Partners on the AgTechUCD Agccelerator Programme, include AIB, The Yield Lab Europe, Devenish, Carberry, Ornua and HerdWatch who are providing financial and mentoring support. Additional mentoring support will be provided by Dawn Farms, Greencore,

// During the year AgTechUCD announced the launch of a new accelerator programme dedicated to early-stage AgTech and FoodTech start-ups //

Kubota, Dairymaster, the Virtual Vet, Finistere, IFAC, Macra Na Feirme, HBAN and Atlantic Bridge. Participating start-ups will have access to specific supports from AWS Activation, Catalyze, Deloitte and FR Kelly.

AgTechUCD also hosted on 'Inside AgTech' webinar with guest speaker John Hartnett, the founder and CEO of SVG Ventures | THRIVE, as the guest speaker.

2021 NovaUCD Innovation Awards

The NovaUCD Innovation Award was established in 2004 to highlight UCD's commitment to innovation. There are six categories, in addition to the NovaUCD Innovation Award. The awards recognise and celebrate knowledge transfer, consultancy and entrepreneurial achievements and successes, and the promotion of an innovation culture, made by members of the UCD research and innovation community. The recipients of the 2021 NovaUCD Innovation Awards are profiled on page 58.

2020 EY Entrepreneur of the Year Award

Nicola Mitchell, the founder and CEO of Life Scientific was named the overall winner of the prestigious 2020 EY Entrepreneur of the

Pictured is Bobby Healy, founder and CEO, Manna, the drone delivery start-up headquartered at NovaUCD. During the year closed a $25 million Series A investment round led by Draper Esprit.

Year Award. The company has strong links with the University and was headquartered at NovaUCD for many years before moving to NexusUCD.

Established by Nicola Mitchell in 1995, Life Scientific specialises in the development and registration of off-patent agrochemicals and currently has a portfolio of more than 60 products available in EU agrochemical markets. The company, with an annual turnover of €60 million, currently employs over 80 people and recently located to its new headquarters in Belfield Office Park, adjacent to UCD.

Acquisition and Fundraising Successes

During the year OncoMark, a UCD spin-out established in 2007 by Professor William Gallagher, UCD School of Biomolecular and Biomedical Science and Steve Penny, was acquired by a multinational diagnostics company. OncoMark's founders and management team have established a new diagnostic start-up, OncoAssure, based at NovaUCD, which is utilising the OncoMasTR technology under licence from OncoMark to develop new panels of biomarkers for applications in prostate and other cancers.

In addition, several UCD spin-outs and spin-ins were successful in fund-raising.

Akkure Genomics, an Irish digital health scale-up headquartered at NovaUCD, which is developing a disruptive MedTech platform for the global clinical trials industry, raised just over €1.2 million in a crowdfunding campaign from 318 investors via the Spark Crowdfunding platform.

Manna, the drone delivery start-up headquartered at NovaUCD and with offices in Wales, closed a $25 million (€21 million) Series A investment round led by Draper Esprit, with participation from Team Europe, DST Global, and with participation from existing investors

Dynamo Ventures, Atlantic Bridge and Elkstone. During the COVID-19 pandemic Manna trialled its service in Oranmore, Co Galway, representing the largest drone delivery trial of its kind globally.

Theya Healthcare, the Irish health and well-being garment producer and NovaUCD client company, secured a €500,000 investment from the University of Vermont Health Network, a not-for-profit integrated academic health system that serves more than one million residents in the north-eastern US.

Zipp Mobility, the Irish shared micromobility operator headquartered at NovaUCD, which is now operating e-scooter schemes in 8 cities across the UK and Poland, secured €1.3 million in funding during the year, including €562k secured through a crowdfunding campaign on the Spark Crowdfunding platform.

Awards and Other Successes

AquaB (AquaB Nanobubble Innovations Ltd), a UCD spin-out company, won the Water Award category at the 2020 Institution of Chemical Engineers (IChemE) Global Awards. AquaB was established to commercialise a new energy-efficient method to generate and release substantial volumes of metastable, nano-scale gas bubbles in water. This method is based on research carried out by Professor Niall English and Dr Mohammad Reza Ghaani at UCD's School of Chemical and Bioprocess Engineering, who are the co-founders of AquaB.

During the year Equal1 Laboratories (Equal1), the silicon-based UCD quantum computing spin-out, announced that it is the first company to demonstrate a fully integrated quantum processor unit (QPU) operating at 3.7 kelvin, a major milestone with implications for the trajectory of quantum computing. Equal1 was founded by Dirk Leipold, Mike Asker and Professor R Bogdan Staszewski as a spin-out from the UCD School of Electrical and Electronic Engineering. The company has offices at NovaUCD and in California.

Iamus Technologies, an artificial intelligence and robotics company headquartered at NovaUCD, which was named winner of the Alfie Cox Best Overall Start-up Award at the 2020 Enterprise Ireland Innovation Arena Awards competition run in association with the National Ploughing Association. Iamus has developed an AI and autonomous robotic solution called 'Gallus' that works within the chicken houses to constantly monitor key welfare and environmental variables in the chicken shed.

NovoGrid, a UCD spin-out company, was awarded the Technology Innovation Award for its GridBoost technology at the 2021 Wind Investment Awards. GridBoost is a patented grid edge intelligence software technology which automates and removes inefficiencies in renewable generators and electrical grid operations and was developed by Professor Andrew Keane and his team at UCD.

UCD Innovation Academy

This year was the UCD Innovation Academy's tenth anniversary and an historic year for the Academy, doubling its student numbers, growing its team by 50%, securing multi-year funding and embracing sustainability and digital transformation as strategic priorities.

Highlights include:
- 2,000 learners engaging through immersive online learning;
- 67% increase in the number of UCD undergraduate students engaging in elective modules at the UCD Innovation Academy with 923 students participating;
- Professor Sir Mark Welland, Deputy Vice Chancellor of Cambridge University began his role as a new External Examiner;
- 360 programme participants across public, private and non-profit sectors;
- New module at Beijing Dublin International College on innovation and entrepreneurship.

COVID-19 became part of the education landscape and the Academy leaned into this new reality, translating its unique experiential learning pedagogy to 'live online' with student numbers doubling and overwhelmingly positive feedback. Under Human Capital Initiative (HCI) Pillar 3, the Academy partnered with TU Dublin to secure €17.5 million in funding, of which €6.1 million (2020-2024) was assigned to the Academy, for a collaborative project. The project, Convene, seeks to transform university and enterprise engagement and the Academy has already hired 11 new staff members, adding diverse and transdisciplinary talent to the UCD ecosystem. Convene's enterprise focus has opened doors and partnership opportunities with industry leaders in Ireland.

In a flagship project for Convene, the Academy, working with Cappfinity, has co-created a unique approach to identifying and developing transversal skills, a self-led virtual reality transversal skills programme. The programme's cutting-edge technology is fully grounded in a wraparound academic experience. Through Convene, the Academy also began work on its own MakerSpace and Sustainability Lab in 2021.

The Academy launched an Innovation Fellowship in 2021 with 11 UCD academics from a range of disciplines. Continuing the sustainability theme, the Academy also launched a Graduate Diploma in Design Thinking for Sustainability in 2020 with funding, ca. €1 million (2020-2023), from HCI Pillar 1 and 64 students participated in its first year. Under the July stimulus funding, the Academy succeeded in securing 600 modular places to enable us to run a joint professional diploma in transversal skills with TU Dublin.

Throughout the year the Academy has continued to position itself as a thought leader in education and innovation and in June, they welcomed Andreas Schleicher, Director of Education and Skills, OECD who spoke at the Academy's Festival of Education.
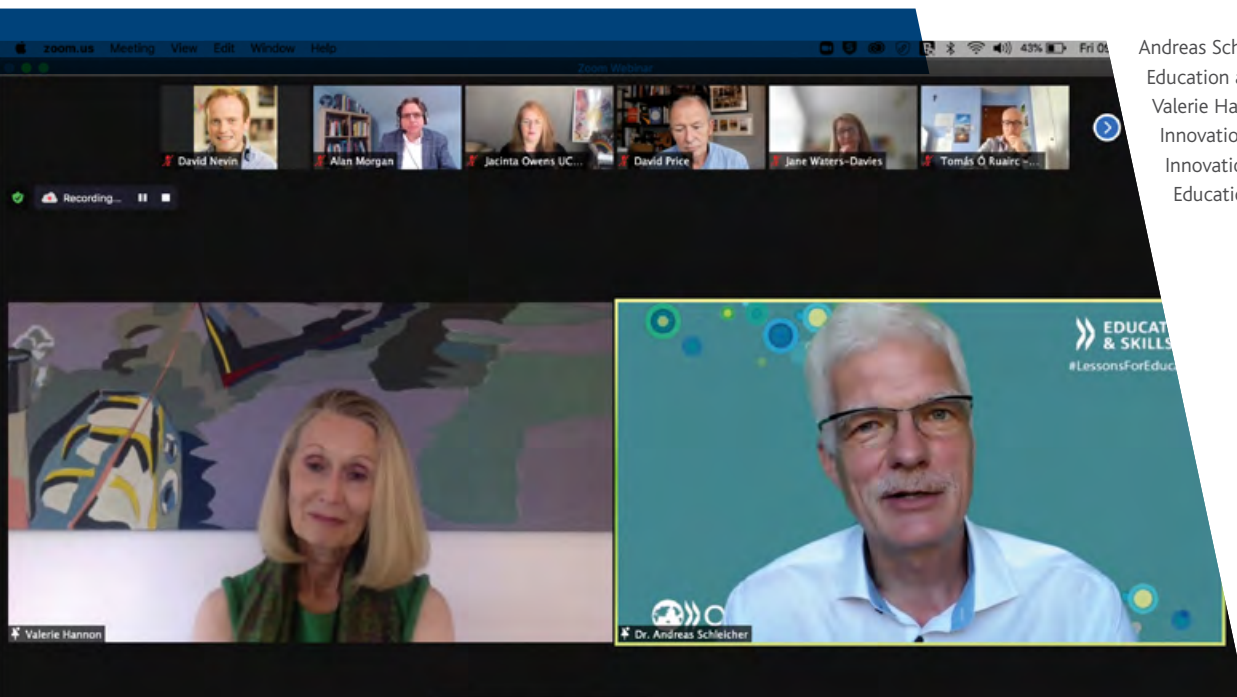
Andreas Schleicher, Director for Education and Skills, OECD talks with Valerie Hannon, co-founder of the Innovation Unit (UK) during UCD Innovation Academy's Festival of Education.

2021 NOVAUCD INNOVATION AWARD WINNERS

Professor Patricia Maguire

The recipients of the **2021 NovaUCD Invention of the Year Award** are: Professor Patricia Maguire (pictured), UCD School of Biomolecular and Biomedical Science; Professor Fionnuala Ní Aínle, UCD School of Medicine; and Dr Paulina Szklanna, UCD School of Biomolecular and Biomedical Science; for their discovery of biomarkers which can be used to diagnose preeclampsia, a dangerous pregnancy complication risk.

Professor Fiona Doohan

Pictured is Professor Fiona Doohan, UCD School of Biology and Environmental Science, recipient of the **2021 NovaUCD Innovation Award.** Professor Doohan's research is focused on improving the sustainability of crop production systems in Ireland and globally, and enhancing the diversification, safety and transparency of Irish food systems. She has secured over €30 million in research funding to date and has filed a total of 14 invention disclosures, 7 of which have been patented and 3 licence agreements have been signed with industry. Professor Doohan is also a co-founder of CropBiome Ltd, a joint UCD-TCD spin-out.

Professor R Bogdan Staszewski

Equal1 Labs, which is developing a new type of quantum computer based on the latest advances in semiconductor CMOS technology, is the recipient of the **2021 NovaUCD Spin-out of the Year Award.** The company, founded by Dr Dirk Leipold, Professor R Bogdan Staszewski (pictured) and Mike Asker, is a spin-out from the UCD School of Electrical and Electronic Engineering.

Professor Michael Wallace

Pictured is Professor Michael Wallace, UCD School of Agriculture and Food Science, recipient of the **2021 NovaUCD Consultancy of the Year Award,** for a study entitled 'Economic Impact Assessment of the Tillage Sector in Ireland' commissioned by Tillage Industry Ireland through ConsultUCD.


Charlie Gleeson

Pictured is Charlie Gleeson, founder and CEO of Zipp Mobility, the micromobility start-up, recipient of the **2021 NovaUCD Founder of the Year Award.** During 2020 Zipp Mobility secured over €1.1 million in seed funding, including €250,000 from Enterprise Ireland and launched e-scooter operations in multiple UK locations.

Dr Paul Cuffe

Pictured is Dr Paul Cuffe, UCD School of Electrical and Electronic Engineering, recipient of the **2021 NovaUCD Innovation Champion of the Year Award** for his dedication to working with UCD engineering programme students to unlock the commercial trajectory of their final year dissertation projects.
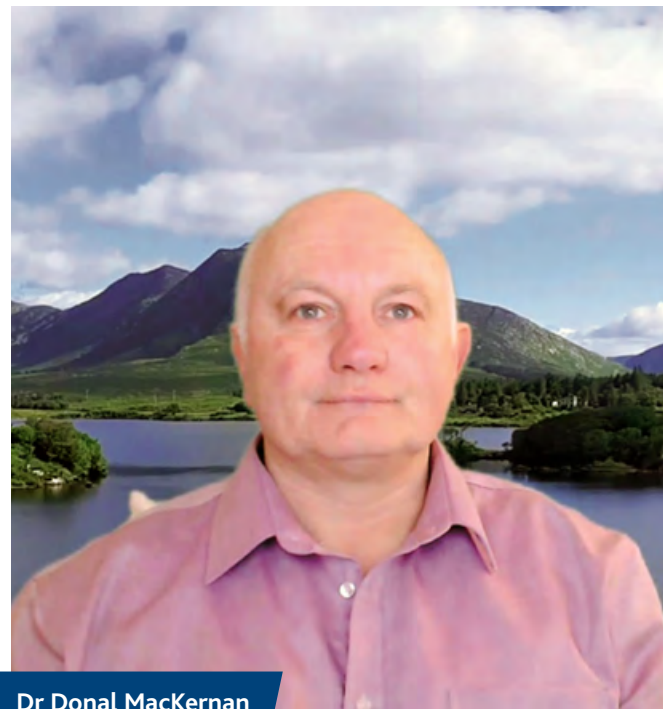
Dr Donal MacKernan

Pictured is Dr Donal MacKernan, UCD School of Physics, who has developed a disruptive molecular switch platform technology, recipient of the **2021 NovaUCD Licence of the Year Award.** During 2020 this technology was licensed by NovaUCD to a US-based company Fionnachtain Inc with an initial application as a point-of-care medical diagnostic for COVID-19 and influenza.

GLOBAL ENGAGEMENT

Students taking part in the President's Welcome Ceremony, during which there is a scarving ceremony. Assoc. Prof. Paul Fanning, Provost of BDIC welcomed students and addressed the ceremony virtually.

Professor Dolores O'Riordan
UCD Vice-President for Global Engagement

This year saw us complete the delivery of our 2016-2020 Global Engagement (GE) Strategy, which set out to enhance UCD's international culture, grow our global reputation and increase the impact of our activities on key global issues.

Having a dedicated strategy to guide global engagement activities has proven invaluable over the last four years, particularly when faced with the challenges and disruptions posed by the COVID-19 pandemic. We were pleased to reflect on the many outputs captured in the infographic opposite.

It was also an intense planning period as we consulted with the UCD community and external stakeholders to shape the GE Strategy for 2021-2024. It was my great pleasure to launch the new strategy in May 2021. The event was broadcast via webinar, with colleagues from around the University sharing their thoughts and experiences of global engagement to illustrate the new

strategy's twin objectives of providing a Global Experience for all at UCD and advancing UCD's Global Impact. Core to the strategy is the message of shared ownership to signal to the UCD community that global engagement is something we all can and should consider a core aspect of our roles.

On UCD's Dublin campuses, 7,239 international students registered, representing 23.6% of our Dublin students and bringing diversity to our community with students from 139 different countries.

UCD's international student recruitment engagement defied expectations in 2020, bolstered by strong regional engagement

7,239

international students are registered on UCD's Dublin campuses representing 23.6% of our Dublin students

through our Global Centres in China, Malaysia, India, UAE and USA. UCD proved incredibly resilient in attracting international students with virtual engagement and digitised materials used to connect with prospective students. We launched several initiatives to welcome our international students. Welcome packs included free SIM cards, and access to a free bicycle scheme for exploring Dublin. Mindful of public health restrictions, and reduced opportunities for social interaction, over 70 virtual Global Lounge events took place to support the social and cultural integration of international students.

A highlight of the year was hosting UCD's first Global Partnerships Forum. Restrictions on travel necessitated a creative solution to connect with our partners worldwide. Using digital platforms, in just one week we connected to over 230 partners in 32 countries. Through live sessions, we engaged in discussions addressing the salient sectoral themes, including the future of global partnerships and the importance of prioritising sustainability in international activity.
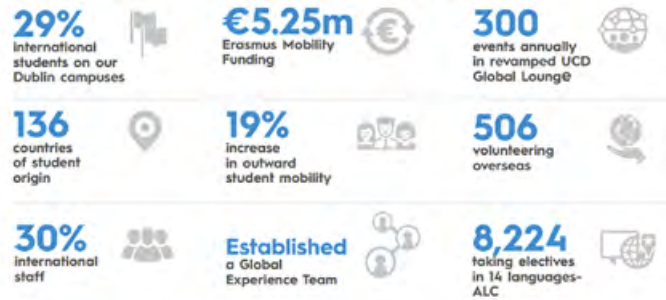
COVID-19 related travel restrictions provided an opportunity to think creatively about student mobility. In the past year, more than 300 UCD students participated in virtual mobility opportunities offered through UCD's global networks, including the NICE programme, the U21 Global Citizens programme, U21 Sustainable Micro-Internships, U21 RISE, and others.

UCD Volunteers Overseas' entire volunteering and global citizenship programme took place remotely with 43 participants in the year-

Global Culture encompassing all UCD Life

29% international students on our Dublin campuses

€5.25m Erasmus Mobility Funding

300 events annually in revamped UCD Global Lounge

136 countries of student origin

19% increase in outward student mobility

506 volunteering overseas

30% international staff

Established a Global Experience Team

8,224 taking electives in 14 languages-ALC

Global Reputation and Partnerships

No 1 Global University In Ireland according to US World News Best Global Universities Ranking

Increased Alumni Engagement
30% alumni overseas
169 countries
42 Chapters

3 Joint International Colleges in China with 2,091 students enrolled
5 Global Centres

560 active partners 61 countries
ROWAN Partnerships database created

CAESAR U21 UNICA WUN members

long programme. Health projects and education and livelihood projects were implemented in India, Tanzania and Uganda with significant outputs including 36 children fitted for physiotherapy equipment to improve their quality of life. In New Delhi 40 young girls from vulnerable communities were afforded access to online education.

The opening of two new joint international colleges in China, in September 2020, was a significant achievement for UCD in transnational education.

With these two new ventures, the Chang'an-Dublin International College for Transportation at Chang'an University (CDIC) in Xi'an and the Guangzhou-Dublin international College for Life Sciences and Technology at South China Agricultural University (GDIC) in Guangzhou, coupled with the Beijing-Dublin International College at Beijing University of Technology (BDIC) established in 2012, UCD is now unique internationally in operating three joint international colleges in China. This is testimony to UCD's standing as a truly Global University and our acknowledged expertise in transnational education.

Despite the challenges presented by COVID-19, both new colleges and BDIC met their respective recruitment targets and between them had approximately 2,100 students studying towards UCD degrees this year. The world-class education and learning experience provided is evidenced by the 335 graduates from BDIC of whom 211 went on to further study abroad, which included 50% and 70% respectively of these graduates having offers for universities in the Top 50 and Top 100 of the QS World Rankings.

Online module delivery at the UCD Applied Language Centre continued in the past year with interest in international languages seeming to burgeon in 2020/21. Additional levels of Arabic, Korean and Portuguese were added to the module portfolio. The International Pathway Programmes were offered online in 2020/21 with very high student success and satisfaction rates.

Pictured are CDIC students who took part in an intensive English language programme during their summer break. They are registered to the three CDIC programmes - Civil Engineering Infrastructure, Automotive Engineering, and Transport City Planning and Environmental Policy and have completed Stage 1 in Summer 2021.

This year saw the official recognition of the successful completion of the International Pathway Programmes as meeting UCD's English Language requirements which promises to open the programmes to an even wider cohort in the coming years. Evidence of this has been seen with the programme welcoming its first Russian students. We were delighted to deliver the Senior Chinese Officials Training Programme sponsored by Ireland's Department of Foreign Affairs, now running for 20 years. The virtual two-week programme was very successful.

To celebrate the Lunar New Year in February, UCD Confucius Institute streamed the '2021 Spring Festival Gala Ireland' to audiences all over the world with more than a thousand viewers. The programme demonstrated the creativity of the teachers and students at the Institute.

To offset the shortage of teachers from China due to travel restrictions, UCD organised a series of webinar training programmes for local Chinese teachers in July 2021. The training programme built up the teaching capacity for Irish schools.

The Irish final of the 20th 'Chinese Bridge' Chinese Proficiency Competition for Foreign College Students took place in August with UCD's Matthew Kelly winning the top prize.

Gaeltacht UCD continued to promote the Irish language and culture, providing courses online to students and staff. Scholars from *Teach na Gaeilge* UCD were particularly innovative in their activities, creating interactive competitions, podcasts and vlogs for social media, attracting participation from Irish speakers and learners worldwide.

The centre's *Cultúr na Céadaoine* series (Wednesday's cultural workshops) delivered Irish language and culture workshops. Themes including Irish language literature, festivals, folklore, flora and fauna, food and music proving popular with alumni at home and abroad.

Bespoke linguistic and cultural programmes were delivered live online for students based in the Beijing Dublin International College (BDIC) and Chang'an Dublin International College of Transportation (CDIC). The live presentations and lessons provided the opportunity for UCD students in China to gain an insight into life in Ireland.

Thank you to all who contributed to these successes throughout the year and particularly for the creativity shown to support the UCD vision of *'Bringing the best of the world to Ireland and the best of Ireland including its culture to the world'* in the challenging environment of 2020/21.

Professor Dolores O'Riordan
UCD Vice-President for Global Engagement

Pictured at the UCD lake are Gaeltacht UCD Residence Scheme Scholars, (l-r) Eoghan Ó Curnáin, Niamh Lavelle, Colm Ó Ruanaidh, Cathán Bonner and Theresa Benny.

EQUALITY, DIVERSITY AND INCLUSION

UCD Gender Equality Action Group Members. Front row (l-r): Dr Aoife Gowen, UCD School of Biosystems and Food Engineering; Prof Orla Feely, Vice-President for Research, Innovation and Impact; Prof Colin Scott, Vice-President for EDI; and Dr Donal Finn, UCD School of Mechanical and Materials Engineering. Second row (l-r): Dr Saoirse Tracy, UCD School of Agriculture and Food Science and Prof Joe Carthy, UCD School of Computer Science. Third row (l-r): Marcellina Fogarty, Strategic EDI Manager; Elaine Hassett, Head of Recruitment Services; and Eimear O'Reilly, EDI Unit. Fourth row (l-r): Assoc Prof Catherine Mooney, UCD School of Computer Science and Rory Carey, Director, UCD Culture and Engagement. Fifth row (l-r): Mark Simpson, UCD Culture and Engagement and Prof Kath Browne, UCD School of Geography.

Professor Colin Scott
Vice-President for Equality, Diversity and Inclusion

The pandemic has been challenging for everyone and I am aware that those in the groups protected in legislation and under our policies on equality grounds are liable to have experienced particular difficulties.

An inclusive and flexible approach has enabled our Schools and Units to support students and employees during this time and this commitment and flexibility will continue to be required over coming months and years to address risks that the pandemic will make inequalities worse.

EDI Survey

To support our strategic equality, diversity and inclusion planning processes, meet statutory responsibilities and assess the impact of initiatives to date, an EDI survey was undertaken to obtain the views and insights of all UCD employees. A 35% response was achieved and a preliminary report has been published with key findings. We will ensure that actions are taken to address these findings and a full report will be published in the autumn.

EDI Strategy Review

The University is currently undertaking an interim review of the EDI Strategy 2018-2020-2024 to ensure alignment with the UCD Rising to the Future Strategy. Dr Gráinne Healy facilitated a workshop with the EDI Group to identify how the EDI Strategy can contribute to the achievement of the UCD strategy and to identify actions to address any gaps. The outputs from employee consultation through the EDI Survey will also feed into the revised EDI strategy which will be in place in Autumn 2021.

Athena SWAN

UCD renewed its institutional Athena SWAN accreditation in September 2020 and is implementing the broad range of actions in its gender equality action plan 2020–2024. Five UCD Schools were

awarded Athena SWAN bronze awards from the April 2021 round. This now brings the total number of School awards to 13 and one combined College award covering 6 Schools. Schools will continue to be supported as they work towards accreditation and implement gender equality action plans as per EDI Strategic Objective 1.

Collaboration with External Bodies

UCD continues to collaborate with external organisations to promote inclusion as committed to in Strategic Objective 6 of the EDI Strategy.

- UCD recently joined the Open Doors initiative with a group of over 95 companies and NGOs, who work with government to create pathways to employment for people from marginalised groups. These can be internships, scholarships, training courses, aiding entrepreneurs or full/part-time employment, from a range of backgrounds and abilities.
- An EDI University of Sanctuary sub-group was recently established to oversee the implementation of the commitments made by UCD under its University of Sanctuary status and to engage with the National University of Sanctuary Ireland Committee.
- UCD is also collaborating with See Change, an organisation dedicated to ending mental health stigma. It aims to create a workplace environment where people can be open and positive about their own and others' mental health. A Mental Health and Well-being Steering Group was established to support the development and implementation of a clear framework around mental health and well-being for employees in UCD and will be based on the See Change Six Step Workplace Programme.

Sector-Wide Projects

The EDI in Higher Education online programme developed collaboratively by the Irish university sector represents a blended approach to generating conversation and engagement with EDI and human rights issues and complements other institutional awareness-raising initiatives.

UCD secured funding from the HEA to lead on a sector-wide initiative to support the implementation of the Public Sector Equality and Human Rights Duty. This funding will support the initial phase of implementation involving the assessment of equality and human rights issues in universities.

UCD has led on the establishment of two networks: an all-Ireland LGBTI employee and student network to support the sharing of

// Five UCD Schools were awarded Athena SWAN bronze awards from the April 2021 round. This now brings the total number of School awards to 13 and one combined College award covering 6 Schools //

Congratulations to the School Athena SWAN and Juno Awardees. Front row (l-r) James O'Sullivan, UCD School of Chemistry; Dr Pascale Baker, UCD School of Languages, Linguistics and Cultures; Prof Jessica Bramham, UCD School of Psychology; Dr Ross Neville, UCD School of Public Health, Physiotherapy, Sports Science; Prof Abbey Hyde, UCD School of Nursing, Midwifery and Health Sciences; and Prof Niamh Hardiman, UCD School of Politics and International Relations. Middle row (l-r): Melanie Pape, UCD School of Languages, Linguistics and Cultures; Dr Siobhán Donovan, UCD School of Languages, Linguistics and Cultures; Dr Michelle Downes, UCD School of Psychology; Assoc Prof Jos Elkink, UCD School of Politics and International Relations: and Assoc Prof Sheila McBreen, UCD School of Physics. Back row (l-r): Prof Brian Rodriguez, UCD School of Physics (Juno recipient); Prof Catherine Blake, UCD School of Public Health, Physiotherapy, Sports Science; Prof Suzanne Guerin, UCD School of Psychology; Prof Colin Scott; and Eimear O'Reilly, EDI Unit.

// A UCD anti-racism campaign also commenced in advance of the 2021/22 academic term, both online and on campus, to highlight that UCD does not tolerate racism and promotes an inclusive campus //

information and to collaborate on key projects, and the IUA EDI Data Practitioner Network which emerged from the national EDI Data Conference hosted by UCD in September 2020.

UCD will chair the IUA Vice-Presidents for EDI network 2021/22, as well as chairing the Athena SWAN Practitioner Network in 2021/22, which will bring together practitioners involved in the development of Athena SWAN applications and gender equality action plans.

EDI Events

Raising awareness of EDI and our responsibilities as members of the UCD community is a key priority under EDI strategic objective 5.

- The EDI Annual Report 2019/20 was launched at an EDI Webinar event in March with over 100 people in attendance. Professor Kalwant Bhopal from the University of Birmingham spoke on the topic of race and ethnicity; Joan Freeman, founder of Pieta House, spoke on suicide prevention and the importance of reaching out and seeking help supports; followed by an excellent panel discussion on mental health and well-being.
- IDAHOBIT – the International Day against Homophobia, Biphobia, Inter-sexism and Transphobia raises awareness of discrimination and violence against LGBTI people worldwide. UCD marked the day with an online panel discussion, *Challenging Discrimination in Healthcare,* organised by UCD LGBTI Staff Network and UCD School of Nursing, Midwifery and Health Systems. Ways to visibly show support for LGBTI in UCD were discussed and promoted including the use of pronouns (she/her, he/him, they/them) in your email signature and in your social media.
- PrideInOurCurriculum – To mark Pride, a thought leadership webinar on LGBTI inclusion in the curriculum took place with guest speakers.

- International Women's Day this year was oriented around the theme #Choose to Challenge. This highlighted that we can all choose to challenge and call out gender bias and inequality. A webinar was hosted on 8 March on the theme 'Bridging the Gender Gap – Research and Responses to COVID-19', with guest speakers Chryssi Giannitsarou, Economist, Faculty of Economics, University of Cambridge; and Dr Ioana Latu, Department of Psychology, Queen's University Belfast.
- Gender Identity training and workshops took place over the last year with students and employees to develop greater awareness, clarity and confidence in implementing the UCD Gender Identity & Expression Policy to support students and employees.

Race and Ethnic Equality in UCD

As part of the work programme of the UCD EDI Race and Ethnicity Equality Working Group, a series of Race and Ethnicity Listen and Learn Focus Groups with students and employees commenced in Spring of this year. A UCD anti-racism campaign also commenced in advance of the 2021/22 academic term, both online and on campus, to highlight that UCD does not tolerate racism and promotes an inclusive campus.
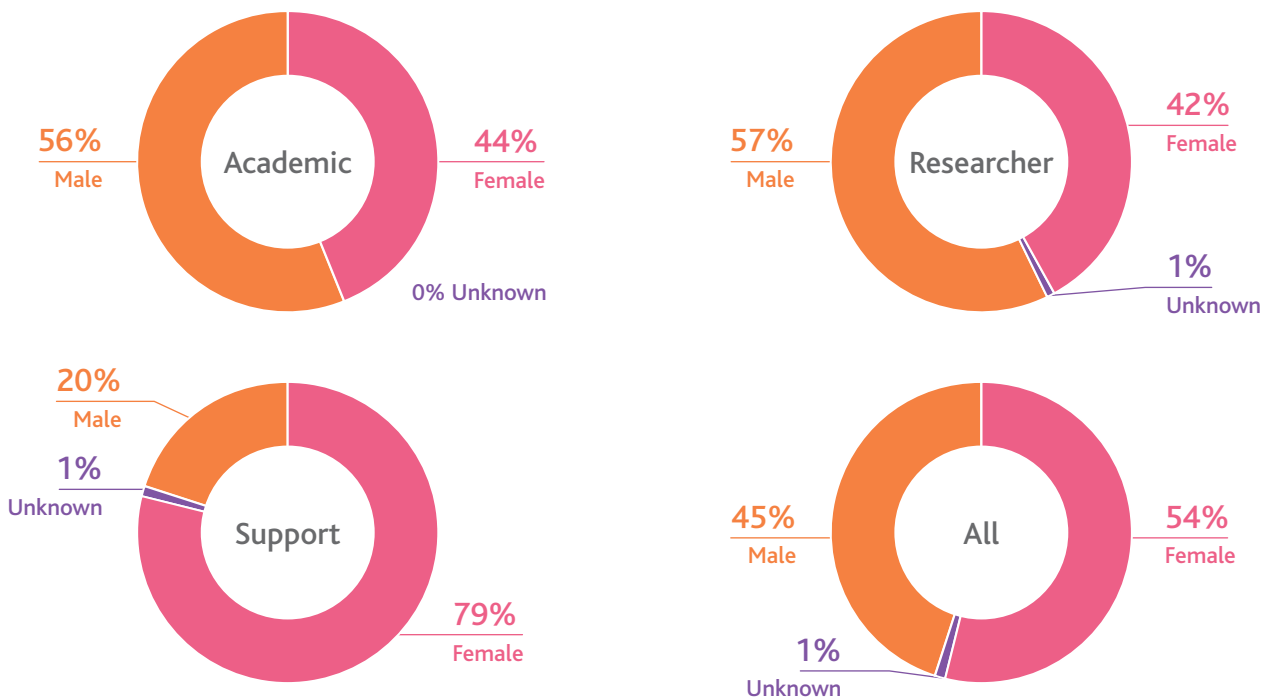
Dignity and Respect

A report on the Dignity and Respect Review was published following an extensive period of review and consultation that took place with the University community and externally. The Consent Framework Action Plan was also submitted to the HEA which outlines actions the University will take to address sexual harassment and sexual violence issues within UCD.

// Raising awareness of EDI and our responsibilities as members of the UCD community is a key priority //
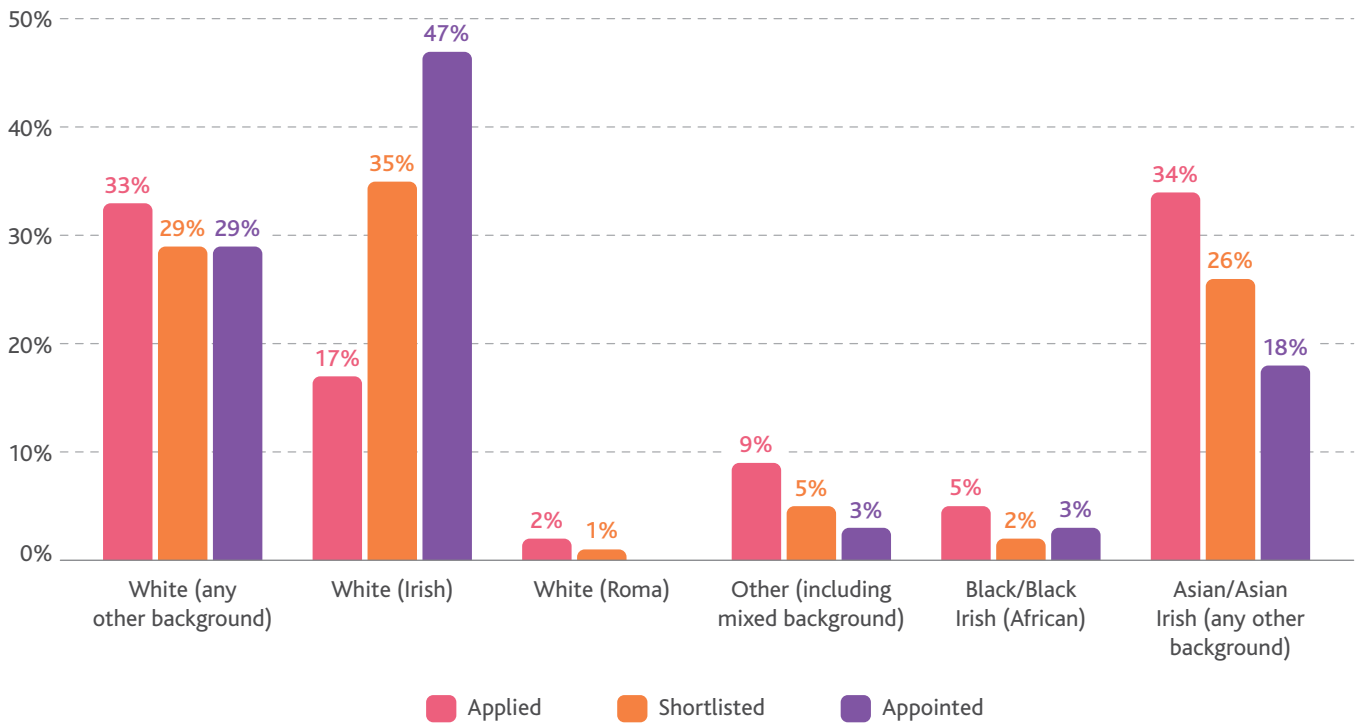
Employees by Gender 2020/21

Staff Category		Female	Male	Unknown	Grand Total	% Female
Faculty	Full Professor	51	123	–	174	29%
	Professor	44	68	–	112	39%
	Associate Professor	99	170	–	269	37%
	Lecturer/Assistant Professor	–	1	–	1	14%
	Lecturer/Assistant Professor Above Bar	301	314	1	616	49%
	Lecturer/Assistant Professor Below Bar	31	24	–	55	56%
	Other Academic & Teaching	155	151	3	309	50%
Academic Total		**681**	**851**	**4**	**1,536**	**44%**
Research	Researcher	124	167	3	294	42%
Research Total		**124**	**167**	**3**	**294**	**42%**
Support	Academic Administrative / Professional	363	90	3	456	80%
	Administrative/Professional	434	207	5	646	67%
	Research Support	198	148	6	352	56%
	Technical	178	128	1	307	58%
	Other Support	146	163	1	310	47%
Support Total		**1,319**	**737**	**16**	**2,072**	**64%**
All		**2,124**	**1,754**	**23**	**3,901**	**54%**

Employees by Gender % Split

Academic
56% Male
44% Female
0% Unknown

Researcher
57% Male
42% Female
1% Unknown

Support
20% Male
1% Unknown
79% Female

All
45% Male
54% Female
1% Unknown

Faculty and Researchers by Ethnicity

Faculty (Applied, Shortlisted & Appointed)

Legend: Applied, Shortlisted, Appointed

	Applied	Shortlisted	Appointed
White (any other background)	33%	29%	29%
White (Irish)	17%	35%	47%
White (Roma)	2%	1%	
Other (including mixed background)	9%	5%	3%
Black/Black Irish (African)	5%	2%	3%
Asian/Asian Irish (any other background)	34%	26%	18%

Researchers (Applied, Shortlisted & Appointed)

Legend: Applied, Shortlisted, Appointed

	Applied	Shortlisted	Appointed
White (any other background)	25%	27%	30%
White (Irish)	20%	34%	40%
White (Roma)	1%	1%	1%
Other (including mixed background)	9%	7%	6%
Black/Black Irish (African)	5%	3%	2%
Asian/Asian Irish (any other background)	39%	27%	20%
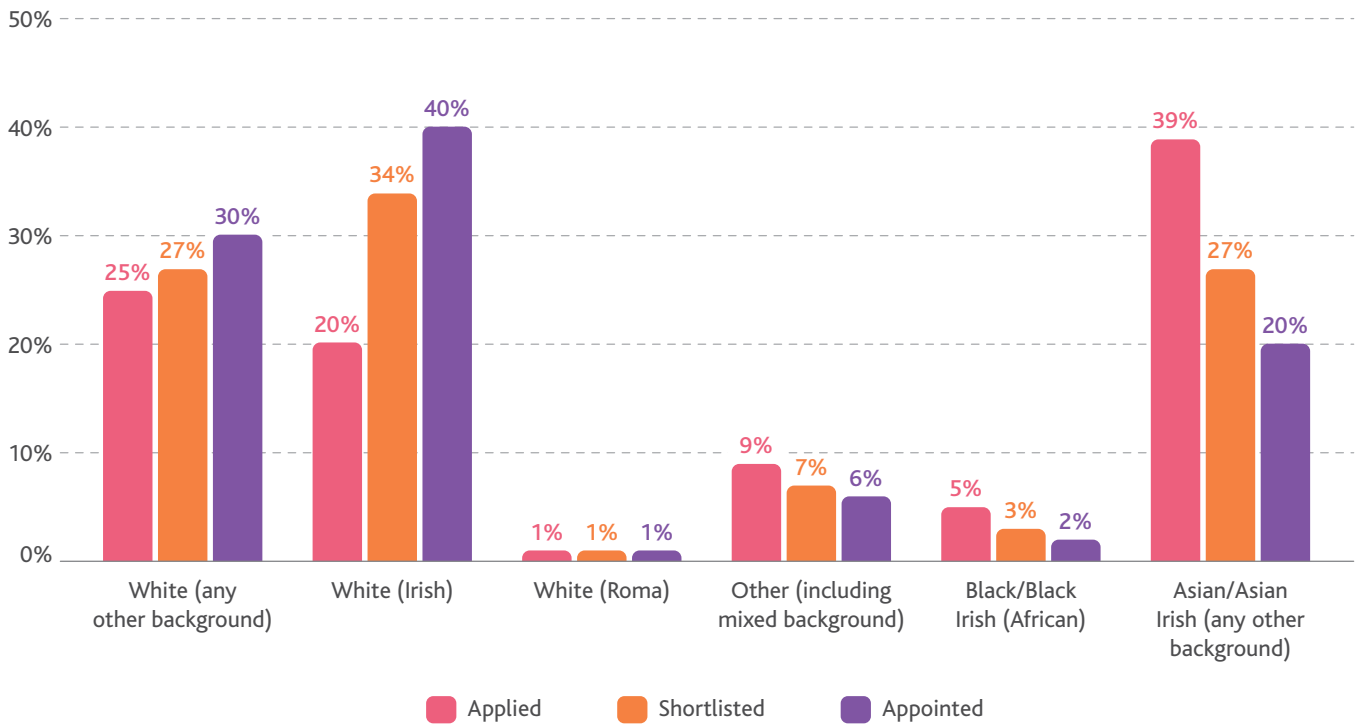
FINANCE AND CAPITAL DEVELOPMENT

An artist's impression of UCD Centre for Future Learning.

David Kelly
Bursar

FINANCE

Outturn for the year

For the year ending 30 September 2021, the University is expecting to generate an operating surplus of €20 million on its consolidated activities. A significant element of this improvement in performance is due to savings and once-off income earned in 2020/21 due to COVID-19, as well as growth in student numbers of 4%. There has been a time lag in spending money in 2020/21 and we expect to correct this is 2021/22. This outturn, which compares to a prior year consolidated operating surplus of €8 million, has also been impacted by a reduction in student residences and commercial income streams due to the closure of facilities for part of the year.

We estimate the cost of COVID-19 to UCD has been in the region of €30 million over the last two financial years. This has been a challenging year for the University with the global pandemic impacting all areas of our operations and a number of unprecedented measures had to be taken to manage expenditure and to protect cash balances, once the University went into lockdown.

These mitigating measures taken during the year should ensure that the University's finances are sufficiently robust to absorb any further adverse impacts from the pandemic and, while there are still significant uncertainties around non-Exchequer income sources, the University maintains that as a result of its healthy cash balances and continued tight cost control that it can sustain its operations in the current volatile economic environment.

Response to the COVID-19 Pandemic

The response to the financial challenges in 2020/21 was rapid and ultimately successful in mitigating the worst of the impacts of the pandemic. The tight controls over expenditure, together with the growth in domestic student numbers and the preservation of non-EU student numbers helped to offset the impact on the declining level of commercial income.

// The response to the financial challenges in 2020/21 was rapid and ultimately successful in mitigating the worst of the impacts of the pandemic //

The Finance Office working with the University Management Team initiated a range of mitigating measures to protect the University's strong financial position, which included cost reduction measures, protecting existing non-Exchequer income streams and maintaining tight controls over capital expenditure.

The global pandemic has caused significant uncertainty regarding major investment decisions on our capital expenditure programme. All construction contractors working on the UCD campus were required to limit activity for four to five months during the year to comply with the increased public health restrictions and this caused a material impact on the capital expenditure programme and project completion dates.

The current capital programme includes three phases of student residences providing an additional 3,000 beds on campus, as well as a 600-space underground multi-storey car park and student amenity buildings, the Future Campus project, phase 3 of the Science Complex, Newman Building and another phase of the sports facilities.

€105m

in increased grant funding was largely attributable to the COVID-19 package of funding initiatives for the third-level sector announced in July 2021

The Finance Office has secured loan funding for active projects and financing for future projects will also require careful planning and extensive preparatory work to secure the necessary loan funding, donor funding and State capital grant funding and this is being done through a 30-year consolidated cash flow forecasting model which is updated regularly for any variations in the annual budget outturns.

As a result of the COVID-19 pandemic, the capital expenditure programme requires constant review to minimise the risks of rising costs, contractor claims and delays to projects and despite a deliberate pause in some of our capital projects during the year as a result of the pandemic, the University remains committed to its planned capital expenditure programme.

State Funding of Higher Education

There was a substantial increase in recurrent grant funding to the sector for 2021. The increased grant funding was largely attributable to the COVID-19 package of funding initiatives amounting to €105 million for the third-level sector announced in July 2021 which provided the resources necessary for the additional spending arising from the pandemic and to prepare for the return of students to campus for the academic year 2021/22. The increased grant funding also included a range of funding packages for the temporary increase of EU CAO students, disadvantaged students, delivery of access and support services for vulnerable students and funding for students facing financial difficulties as a result of the pandemic.

While the increase in grant funding for 2021 was most welcome, the current educational landscape is not without its challenges

Artist's impression of the Ardmore Precinct.

Students taking advantage of the summer heatwave to study outside.

and the biggest financial challenge facing the University continues to be underfunding of the sector, with the consequent pressure on sustainability of operations and on infrastructure as student numbers increase. While the recurrent grant funding to the sector has increased in recent years, the additional funding tends to be earmarked for designated purposes and the State core grant to UCD for 2021 did not meet the full costs of the pay awards in 2021. Nevertheless, UCD managed to continue progress towards meeting its strategic objectives and to achieve an expected surplus position for the financial year 2020/21, albeit at the expense of student: staff ratios, student support services and campus infrastructure.

The University has budgeted prudently for many years to ensure that it can meet its challenges and with the aid of a five-year term financial plan, this will enable the University to continue to invest in the delivery of its strategy and to strengthen its financial position.

The UCD Performance-Based Funding Model

The University has operated a rolling five-year financial model for academic and support units since 2014/15, which has provided a degree of certainty regarding future budget allocations and has also incentivised academic units to generate additional fee income.

Despite the adverse impact of the pandemic, fee income from international students continues to grow but we are seeing increased competition from other universities for non-EU students. Our EU student numbers rose and international student numbers did not fall overall, despite losing virtually all our USA Study Abroad students. This was an excellent outcome in a year that started with great uncertainty.

To implement strategic measures such as the Ad Astra recruitment of 370 extra academics to improve our student staff ratio, we need to implement surplus income-generating and cost control initiatives.

Aligning Financial Planning with the University's Strategic Objectives

Financial planning services provided by the Finance Office are guided by the University Strategic Plan, which is updated every five years. Within the University Strategic Plan 2020-2024, there are specific objectives set out which are relevant to the Finance Office, most notably the need to strengthen the alignment between resource allocation and strategic priorities and the need to diversify budget resources to maximise non-Exchequer income.

Integration of financial planning with other planning strands places the Head of School at the centre of the planning process for each School, ensuring close alignment between financial, educational and research plans.

Procurement

The two major areas of focus for the UCD Procurement and Contracts Office is to obtain cost savings of 10% and to improve compliance by achieving the implementation of a contract management database ensuring timely notification of contract renewal dates and relevant and timely communication with budget holders.

To help achieve these ambitions, we hope to have one centralised expert buying team across the whole University and to introduce a new system for online marketplace requisitioning, so that budget holders can be directed to the correct supplier.

Plans are in place for the introduction of a unified system to allow complete end to end Purchase to Pay (P2P) workflow processes that will automate the entire process from point of order right through to payment.

UCD's new 924-bed Residences.

CAMPUS DEVELOPMENT

We are in the process of investing €1 billion in our Belfield campus. This will provide additional world-class facilities for students, faculty and staff. Having grown student numbers by 25% over the last ten years, we plan to grow them by a further 25% in the coming ten years. We also plan to grow faculty numbers in this same period by 50%. This will meet our ambitious target of a 16:1 student: faculty ratio.

As with most on-campus activities across the University, COVID-19 had a significant impact on campus development and operation of the estate over the academic year 2020/21. Government imposed lockdowns resulted in building sites being closed for long periods of the year, impacting and resulting in delays to several projects.

However, despite these challenges the University has maintained and continues to progress the planning and implementation of its Estate Strategy with its design teams and contractors. Notably in terms of campus planning, significant progress was made in the development of the interim reviews of the UCD Estates Strategy and UCD Strategic Campus Development Plan 2016-2021-2026. These documents, which will be published during the coming academic year, are a mid-term review of the University's strategic capital investment plans, to ensure continued alignment with University, local and national strategy and policy.

UCD Residential Masterplan

An ambitious Residential Masterplan has been developed by Reddy Architecture + Urbanism in conjunction with stakeholders which outlines the potential for an additional 3,000 beds

€1bn

is currently being invested into our Belfield campus. This will provide world-class facilities for students, faculty and staff

being delivered on the Belfield Campus over the lifetime of the masterplan. This has the potential to bring the total on-campus residential population to 6,000.

Despite the impact of COVID-19 and associated lockdowns, significant progress was made in the handover of the residential accommodation within Phase 1 of the Residential Masterplan this year. This provided an additional 924 en suite bedrooms for the start of the academic year 2021/22. Final completion and occupation of the UCD Village will occur in early 2022. The UCD Village will include retail and international food offerings, as well as a gym and a variety of informal and bookable spaces for student activities.

UCD Future Campus

The Future Campus Masterplan presents a vision for the development of a significant portion of the Education, Research and Innovation Character Area adjacent to the main entrance of the Belfield Campus. The project involves the delivery of two new buildings, the Centre for Creativity and the Centre

Artist's impression of the Centre for Creativity.

for Future Learning, as well as significant landscaping, commuting infrastructure and public realm improvements.

Significantly during the past year UCD secured all planning consents for the project and enabling works have commenced to clear and prepare the sites for the future buildings, relocating parking, changes to the road layouts and underground services, including a connection to the Belfield district heating system.

The Centre for Creativity, designed by Steven Holl Architects, will be a landmark building at the main University entrance, helping to deliver a much-improved sense of arrival to UCD and make the campus more visible to passers-by. It will also realise the vision of an Engineering and Architecture Precinct as set out in the Strategic Campus Development Plan, providing bespoke facilities for

the UCD College of Engineering and Architecture in close proximity to the existing Engineering and Materials Science Centre.

The Centre for Future Learning, designed by RKD Architects, will be a centrally located learning hub and will be a key enabler of growth for the University, providing additional, purpose-built teaching facilities. It will be a resource for all disciplines and has been designed with the facilitation of active learning as a core objective, incorporating the kinds of formal and informal spaces that students need to acquire and practice the wide range of skills they will need to thrive in their future careers.

The third element of the Future Campus Phase 1 involves improvements in landscaping, the public realm and commuting infrastructure. In line with UCD's commitment to sustainability, pedestrian, cyclist and public transport will be prioritised. This element of the project will integrate the new buildings with the existing campus and provide a connection between the entrance and the campus through a pedestrianised plaza.

Sustainability is a key feature of the landscape and infrastructure works, including through the aforementioned prioritisation of sustainable transport modes, the integration of existing green spaces where possible, additional planting of trees and reinforcement of the woodland boundary, the use of natural water attenuation features, and the installation of a significant quantity of additional bicycle parking.

Delivered as part of the landscaping elements of the project, a new Bus Interchange will be developed in conjunction with the National Transportation Authority (NTA). The Bus Interchange, developed as part of the NTA's BusConnects programme, will allow for an increase in the quantity and quality of bus routes serving the campus. The Bus Interchange will be integrated with the wider masterplan, including the pedestrian plaza and provide a much-improved experience for bus users.

// The Centre for Future Learning, designed by RKD Architects, will be a centrally located learning hub and will be a key enabler of growth for the University, providing additional, purpose-built teaching facilities. It will be a resource for all disciplines and has been designed with the facilitation of active learning as a core objective //

Artist's impression of the Centre for Future Learning.

Sustainability is also a central feature of both buildings, and they will be designed to meet Near Zero Energy Building (NZEB) standard and will incorporate features such as passive ventilation, natural lighting and green roofs, while a significant portion of energy requirements will come from renewable energy.

UCD Sports and Student Amenities Masterplan

The University aims to further improve and grow sports and recreation facilities on campus, to ensure the quality and choice of sports and non-sports-based amenities are of the highest international standard. To ensure these facilities are developed in a coherent and efficient manner, and to help identify student sports and amenity needs, a detailed masterplan was developed. This masterplan, completed in 2020 by Heneghan Peng Architects in consultation with University stakeholders, presents a vision for the area which includes improvements to the public realm and

// The first development within the new masterplan is UCD's new running track and infield, located at Newstead which has been designed to IAAF standards. This exciting new development will be a significant addition to UCD's already impressive sporting facilities and will support both elite and recreational runners //

landscaping, improved pedestrianised and cyclist routes, as well as a proposal for several new developments aimed at improving both sporting and non-sporting amenities.

The first development within the new masterplan is UCD's new running track and infield, located at Newstead which has been designed to IAAF standards. This exciting new development will be a significant addition to UCD's already impressive sporting facilities and will support both elite and recreational runners.

Work commenced on the running track in 2019/20. As a result of lockdowns associated with Covid-19 there were some delays to the construction schedule however significant progress was made over the year, with completion planned in 2022.

Proposed future developments in the masterplan include a new multi-purpose sports hall as well as an expanded Student Centre to facilitate an enhanced Astra Hall and additional performance space. A design team was procured to commence implementation of the masterplan and design work will commence in the next academic year.

Recent and Planned Capital Developments

Further design work for Science Phase 3 progressed over the year, with the objective of completing the refurbishment of the UCD O'Brien Centre for Science and facilitating continued growth in Science teaching and research. Science Phase 3 will involve the refurbishment of Science North and Science West, which were amongst the first buildings constructed on the Belfield campus in the 1960s and have remained largely unchanged since that time. This project will deliver improved facilities for modern science teaching and research as well as increased area to facilitate future

The new UCD Running Track is under construction with planned completion in 2022.

Encouraging biodiversity on the Belfield campus.

500+

trees were planted to strengthen the campus woodlands and support biodiversity, as part of the annual tree planting programme

growth. A planning application was submitted to the local authority in July 2021 and a decision is now awaited.

The refurbishment and expansion of Ardmore House is now complete, with occupation to commence at the beginning of the next academic year. This project has continued UCD's commitment to restore the campus period houses and incorporate them into the modern estate. The 1,380m^2 restoration project brings Ardmore House into compliance with modern fire safety and disability access standards, providing a new entrance and lift connecting all floors of the protected structure, restoring the original layout of the building, renewing the building services throughout and providing the University with much needed office and meeting space.

Hospitality Services

A variety of quality catering options for students, faculty and staff continued to be rolled out this year in anticipation of a return to full on-campus activities. Steps have been taken to provide outdoor options for tea and coffee on the Belfield and Blackrock campuses. Mobile units located in a number of areas, including beside the Gerald Manley Hopkins Centre and the main lake are endeavouring to provide the community with outdoor options as an alternative to indoor cafés.

A new hot toasted sandwich offering is available in the Gerald Manley Hopkins Centre. Planning is underway to provide a range of new exciting food options and an improved convenience store offering in the UCD Village for 2022.

Landscaping and Biodiversity

UCD's support of the All-Ireland Pollinator Plan has been reaffirmed, with UCD signing up to the new AIPP 2021-2025 as a supporter organisation. Estate Services and academic colleagues are continuing with work to underpin the plan, in encouraging biodiversity into the campus core, through initiatives such as the campus reduced mowing regime, sedum roofs on new buildings and academic research projects such as SUSPOLL (Sustainable Pollination Services in a Changing World) and PROTECTS (Protecting Terrestrial Ecosystems Through Sustainable Pesticide Use).

Enhancements to the Boundary Woodland walk have been completed at the Arboretum, Belfield wood and adjacent to the Conway building, with in excess of 500 trees also being planted to strengthen the campus woodlands and support biodiversity, as part of the annual tree planting programme.

Commuting

In 2020, UCD Estate Services in partnership with the National Transport Authority and Dun Laoghaire Rathdown County Council, implemented several active and sustainable transport initiatives to enable enhanced mobility choices to, from and within the campus.

The 39a bus route, commencing and terminating at the Belfield bus terminus now operates on a 24-hour basis, 7 days a week, greatly enhancing the connectivity of campus to the city centre. In addition, with the completion of Phase 1 of the UCD Student Residential Masterplan the 17 and 175 bus routes will be able to avail of shortened journey times by entering campus via the Owenstown Park entrance, avoiding heavy external traffic on roads surrounding the campus.

At UCD Nova, the new shared pedestrian and cyclist entrance has opened. This new entrance, along with new associated internal shared surfaces connects to the core of campus and is co-located with high-quality covered and uncovered cycle parking, signage and road markings along its route. This new entrance enables pedestrians and cyclists travelling north along the R138 or across the pedestrian bridge over the R138 to enter campus at an earlier point, avoiding the main Belfield entrance and reducing potential for conflict between the various transport modes entering campus or using the external road network in the area.

At the UCD Sports Centre, the roundabout, associated roads and shared pedestrian and cyclist surfaces have been upgraded to cyclist and pedestrian friendly configurations including a new link between the creche road and Clonskeagh roads internal to campus, new and upgraded pedestrian crossings and enhanced speed reduction measures on the road surface including improved road markings and speed radar. The completion of this project has also delivered a key cycling permeability link between Dublin 4 and Dublin 14, as outlined in the Greater Dublin Area Cycle Network Plan.

// The 39a bus route, commencing and terminating at the Belfield bus terminus now operates on a 24-hour basis, 7 days a week, greatly enhancing the connectivity of campus to the city centre **//**

Through the delivery of capital projects and in partnership with the National Transport Authority, over 1,300 new or upgraded cycle parking spaces have been provided across the Belfield campus and an additional 182 cycle parking spaces have been provided on the Blackrock campus since the onset of the pandemic.

These combined projects are delivering improved facilities and services for all campus users and will encourage greater numbers of current and prospective faculty, staff and students to take active and sustainable commutes where possible.

The development of new parking facilities located at car park O2, at the rear of Belgrove Student Residences and additional spaces at car park N1, at Belfield House contributes to consolidation of parking facilities at the periphery of campus and strengthens the pedestrian and cycle friendly core of the campus as outlined in the Strategic Campus Development Plan and the UCD Travel Plan. This strategy to focus relocated parking spaces to the periphery while removing parking spaces from the footprint of planned future buildings and the interior of the campus will ultimately contribute to the ongoing sustainable development of Belfield.

The full return to on-campus teaching and learning has seen an expected increase in the numbers of faculty, staff and students returning to their UCD commute on a full-time or hybrid basis. The forthcoming 2021 Commuting Survey will establish how our commuting and campus attendance patterns have changed since the pandemic.

Energy

UCD has made considerable investments in energy efficiency projects and energy management systems in recent years. This, along with positive user-behaviour, resulted in UCD achieving the Government mandated 2020 target of a 33% improvement in energy efficiency a year early (based on 2019 consumption).

Academic year 2020/21 was a very unusual year in many respects, including in terms of energy consumption. With much-reduced occupancy on campus, energy consumption was much lower than normal. The Energy Team took this as an opportunity to review building base-loads and ensure that the maximum level of energy savings were achieved during this period while maintaining essential services.

As part of the Estates Strategy Interim update, the University is currently developing new targets for 2030 and beyond which will include a new target for energy efficiency and an additional

35.2%

improvement in energy efficiency achieved based on 2019 consumption, a year ahead of the Government 2020 target

Enabling enhanced mobility choices to, from and within the Belfield campus.

target relating to carbon dioxide (CO_2) emissions associated with the operation of University buildings and vehicles.

Also as part of the Estates Strategy update, opportunities to implement energy and carbon dioxide projects to help meet these targets are being identified. As part of this, Estate Services were successful in a grant application to the Higher Education Authority's (HEA) 'Energy Efficiency and Decarbonisation Pathfinder Programme' for the installation of a high-temperature air-source heat pump. This heatpump will be connected to the Belfield District Heating system and will displace a significant quantity of heat currently produced using fossil fuel systems, which will result in considerable reductions in associated CO_2 emissions. Work will continue over the coming year to identify opportunities to further decarbonise the University estate and meet both efficiency and carbon reduction targets.

An application for a medium retrofit of the UCD Quinn School of Business has been submitted to the HEA's Decarbonisation Programme for this year's grant programme. UCD's application focused on cost-effective measures that would improve energy efficiency and reduce carbon emissions in ways that connect to and leverage existing infrastructure.

David Kelly
Bursar

Energy Performance Indicators
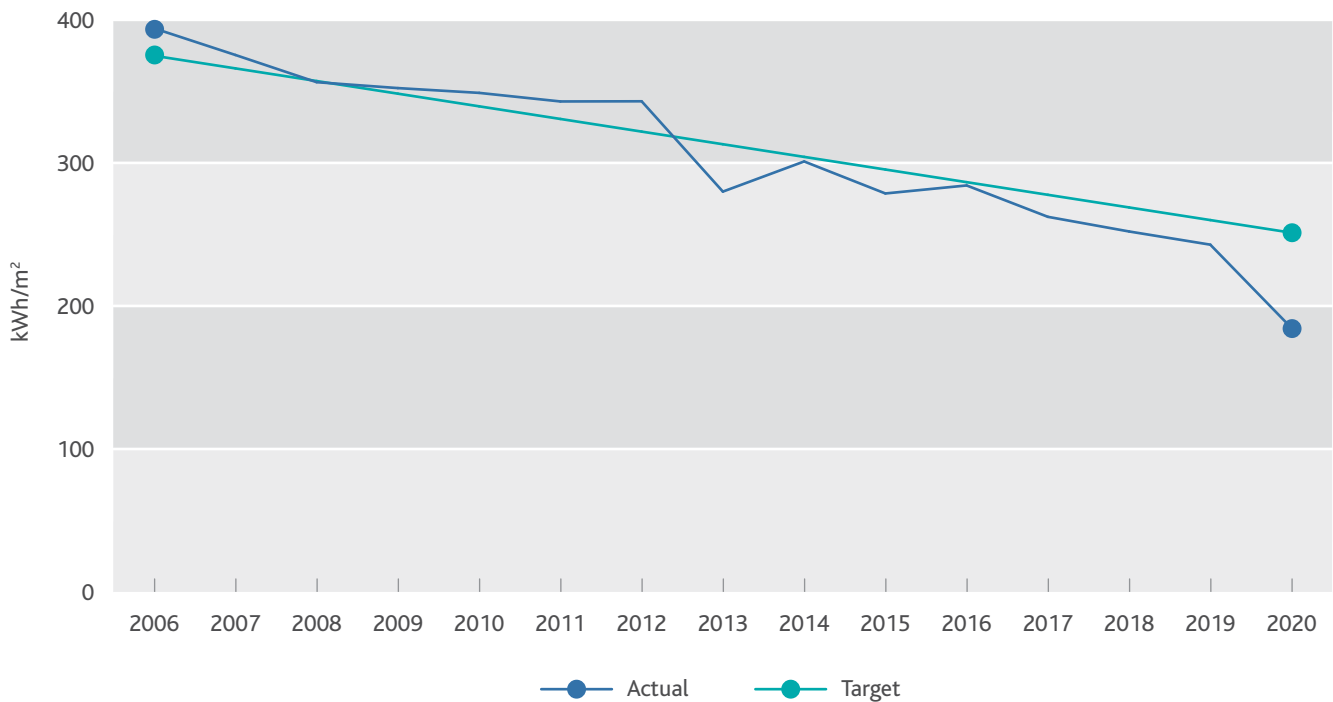
192.63	**14%**
kWh/floor area (m²) 2020 EnPI	improvement on 2019
252.14	**47%**
kWh/floor area (m²) Target EnPI	better than baseline

23%
ahead of target
Note: Reduced activity on campus due to the COVID-19 pandemic/ lockdowns have played a part in 2020 consumption.

49.36kWh
Decrease in primary energy use/m² in 2020 compared to 2019.

HUMAN RESOURCES, SIRC AND LEGAL AFFAIRS

Tristan Aitken
Director, Human Resources,
SIRC and Legal Affairs

The Better Together team challenge used a unique averaging method to ensure that all members of the 55 teams had to contribute to achieving their team's goals though running, walking or cycling. €3,300 was raised for UCD Volunteer Overseas' Uganda healthcare appeal.

I am proud to report that, despite having to work remotely for the past year, the teams that make up this directorate achieved a significant amount, both to keep the University operational and to advance our initiatives in support of UCD's strategy – Rising to the Future 2021-2024.

The exception to this was the SIRC team, many of whom spent a considerable amount of time during the pandemic on campus to ensure smooth campus operations and the whole team was fundamental to ensuring the safe return to campus-based working, research and face-to-face teaching. This report captures just some of the highlights from the year. I would like to express my sincere thanks to all team members for their ongoing efforts on behalf of employees and students and their extraordinary commitment and delivery under the most challenging of circumstances.

In the year ahead we have a significant agenda of work, including a refresh of our functional HR strategy, the completion of our recently extended trial for hybrid working, incorporating a pilot of Activity Based Working, to convert experience into a practical policy with accompanying procedures and a substantial programme of innovative change associated with our Enabler 4 ambitions.

HR Partnering, People and Organisation Development

Autumn 2020 saw the restructuring of UCD HR with the reconfiguration from four directorates to three, namely HR Services, Culture and Engagement and the newly constituted HR Partnering, People and Organisation Development. The focus of the latter has been working strategically with UMT, Heads of School/Unit and people managers to support the achievement of UCD's people objectives.

Headline initiatives include the continued implementation of the Performance for Growth development programme, Leadership and People Manager programmes, community course catalogue and the University-wide provision of the LinkedIn e-learning platform. UCD HR, in conjunction with the UCD Career Development Centre, also launched a new UCD Research Skills and Career Development website for the postdoctoral community.

The period also saw the development of the THRIVE – Leadership in Research Programme, to support the development of faculty members at Lecturer/Assistant Professor or Associate Professor level. The programme, to be launched in September 2021, is a joint initiative between UCD People and Organisation Development, UCD Research and an external training partner, 64 Million Artists.

The Head of School Induction Programme was also overhauled specifically for new Heads of School, to provide them with the necessary information early in their headship.

The HR Partner Team focused on the provision of support to the University's leadership and community throughout our response to the COVID-19 pandemic. In conjunction with the UMT, the team developed UCD's guidance material for the Hybrid Working Trial and will continue to support this initiative through to the completion of its review and development of a formal policy for launch prior to the academic year 2022/23.
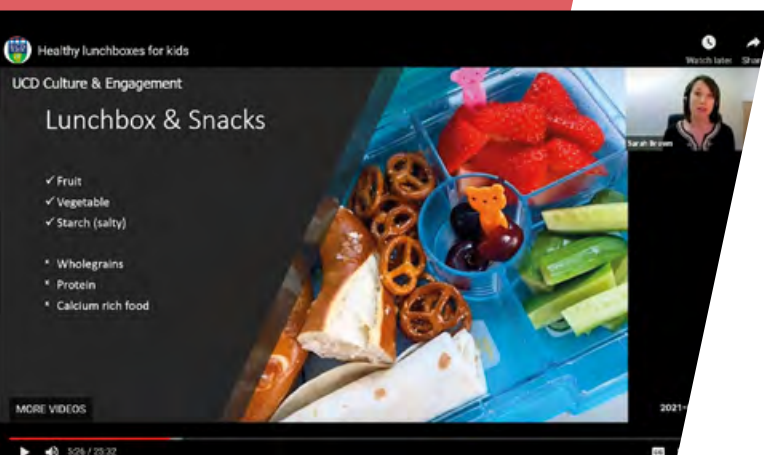
Culture and Engagement

Reconfiguration of the unit saw Promotions and Grading join the existing Equality, Diversity and Inclusion (EDI), Employee Relations, and Engagement and Internal Communications teams.

In support of our strategic objective to be an employer of choice, engagement activities continued online due to the pandemic, across the themes of physical, mental and financial well-being. Over the academic year some 3,000 employee registrations were recorded

3,000

employee registrations were recorded for activities ranging from mental health and well-being webinars to individual and team step challenges

Our photo features Dr Sarah Browne, UCD School of Public Health, Physiotherapy and Sports Science giving a webinar on healthy lunches and snacks. Both physical and mental health were a key focus of the Culture and Engagement team's activity for the year.

// A substantial project led by the unit was the redevelopment of the HR website. Over 200 pages were either developed from scratch or edited to ensure a user-centered website that is easy to navigate //

for activities ranging from mental health and well-being webinars to individual and team step challenges. To support the University's charities of choice: Special Olympics Ireland, UCD Volunteers Overseas and the Champions Scholarship Fund, the virtual physical challenges, in conjunction with Healthy UCD, had a fundraising element, with €11,000 raised.

A substantial project led by the unit was the redevelopment of the HR website. Over 200 pages were either developed from scratch or edited to ensure a user-centered website that is easy to navigate. In addition, each unit was provided with training to enable timely, local updating.

The significant work of the Equality, Diversity and Inclusion (EDI) team, who work closely with the wider Culture and Engagement team, other areas of HR and other University units in supporting employees and students, is recorded elsewhere in this Report. Highlights include undertaking an all-employee survey in May 2021 to assess the impact of EDI initiatives to date and help future planning. In a novel attempt to increase participation, EDI contributed for every completed survey to the UCD access scholarship, raising over €3,000 to provide funding for a student who otherwise could not attend UCD. The unit also supports the Athena SWAN process at University and School level and the implementation of the associated University level Gender Equality Action Plan. The ongoing success of this programme to ensure gender equality is recorded elsewhere.

2020/21 saw significant work undertaken to review UCD's Dignity and Respect Policy, involving all units of Culture and Engagement, with extensive internal and external consultation. The resultant framework, approved by UMT and the Governing Authority, provides for two new dignity and respect policies covering bullying and harassment and separately sexual misconduct, and for the provision of a Dignity and Respect Support Service and communications campaign to ensure that all community members understand that bullying, harassment and sexual misconduct are not tolerated in UCD. Work continued to launch the service for the start of the 2021/22 academic year.

The Employee Relations team supported the successful return to campus teaching by engaging in ongoing consultation with employee representative bodies. They also engaged in a comprehensive review and development of a new probation policy which will assist managers and new employees by applying an effective probation experience, as well as a new employee bereavement policy. The team supported managers and the HR Partner Team across UCD in all matters pertaining to employee relations and dispute resolution.
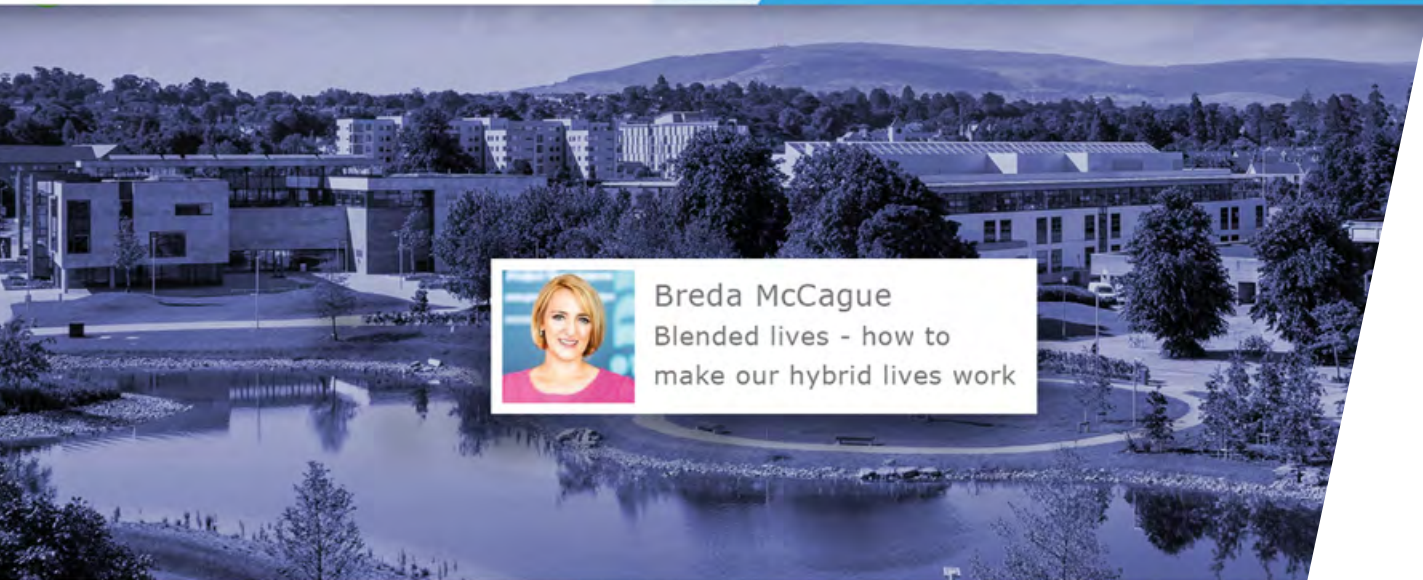
A series of webinars was held to mark National Workplace Wellbeing Day on 30 April 2021, in association with IBEC.

// Resourcing increased the use of technology during the pandemic to support all aspects of the hiring process; enabling interviews, presentations, and seminars to take place remotely //

The Promotions and Grading team facilitated the Faculty Promotions Committee who considered 70 applications for promotion during 2020/21, with 73% of applicants achieving promotion. The Gender Equality Action Plan (GEAP) sets targets which are monitored on an annual basis. In 2020/21, the GEAP target was achieved at all three levels.

The Job Sizing Framework entered a second year and is now in a steady state with applications considered on a monthly basis from September to June of each year. Of the 18 roles submitted over the past year almost 90% were resized to a higher grade.

HR Services

Resourcing increased the use of technology during the pandemic to support all aspects of the hiring process; enabling interviews, presentations, and seminars to take place remotely. Volumes increased in many areas and there were several resourcing related projects, including the hiring of 90 new staff for the NVRL's Backweston laboratory in January 2021 and the processing of 200 contract extensions for researchers who benefited from the DFHERIS/HEA COVID-19 Fund. System enhancements included the introduction of NitroSign for the signing of employment contracts remotely and the upgrade of the Core system to facilitate increased automated communications and the introduction of an interview scheduler, allowing candidates to self-select their interview appointments, have all streamlined the resourcing process.

Further initiatives were implemented to support Colleges, Schools and Support Units. The development and deployment of team structure information for all managers, allows access to their team 'reports-to' structure. This has enabled HR to automate further processes such as contract end-date notification, P4G data and team-based reports via the InfoHub system. The HR Helpdesk operated remotely during the pandemic and continued to provide full support to UCD colleagues, receiving and dealing with on average 1,600 queries each month.

The Employee Self Service (ESS) system was developed to give UCD members of the Single Public Service Pension Scheme access to their pension records online, eliminating the requirement for annual pension statements to be issued. Prior to the pandemic, the issuing of pension statements to pension scheme leavers, a statutory requirement, involved printing and posting statements to approximately 75 people each month. Following consultation with colleagues in HRIS and EAG, personal email addresses are now used by the Pensions Team to issue statements by email, a more efficient and cost-effective way of communicating with leavers from the University.

Legal Affairs

Over the year, the Legal Affairs Team has professionally and proactively advised on a very diverse range of matters across the scope of the activities of the University including in the areas of research, property, international matters, HR and student affairs. The team actively contributed to policy development and sat as

// This year the response to the COVID-19 pandemic dominated once again the work of the SIRC office. The team played a key role in developing the University's COVID-19 response protocols as the country moved through the various phases of the pandemic and on-campus 'face to face' activities gradually returned //

members of a range of committees and groups including for GDPR, Research, EDI, Academic Council Committees and the Faculty Promotions Appeal Committee (FPAC).

The Office of the Data Protection Officer has creatively supported and advised the University and its many parts on the implementation of the University's GDPR Strategy. With its innovative and effective approach, it has greatly helped to increase data protection awareness and compliance throughout the University, including the delivering of training for 92 GDPR Champions across all areas of the University.

The Records Management and Freedom of Information Unit has had a wide brief dealing with the Freedom of Information, Data Protection, and Access to Information on the Environment and Ethics in Public Office Regulations. However, its main concern has been with the processing of requests under those regulations.

Safety, Insurance, Operational Risk and Compliance Office

This year the response to the COVID-19 pandemic dominated once again the work of the SIRC office. The team played a key role in developing the University's COVID-19 response protocols as the country moved through the various phases of the pandemic and on-campus 'face to face' activities gradually returned. Key websites, collating and streamlining the large amount of available pandemic related information for faculty, staff and students were developed, along with the provision of bespoke real-time activity-specific advice to Schools and Units. This effort was supported by the Director of SIRC sitting on many of the University's key COVID-19 response committees.

In addition to the COVID-19 response, the Office continued to provide a high level of service across the areas under its remit, including research ethics, occupational health and safety, and risk management. Innovative solutions to the challenges posed by the lack of direct face-to-face engagement were developed, including a suite of online health and safety training videos.

Tristan Aitken
Director, Human Resources, SIRC and Legal Affairs

With the growth in pet ownership over the pandemic, UCD Culture and Engagement utilised the expertise in the UCD School of Veterinary Medicine to hold a webinar on dog ownership, including a lively Q&A session.

COLLEGE OF ARTS AND HUMANITIES

Niamh Campbell, winner of the 2021 Rooney Prize for Irish Literature and UCD Writer in Residence 2020/21.

Professor Sarah Prescott
College Principal and Dean of Arts and Humanities

Faculty and staff across the College of Arts and Humanities continued to deliver excellence in education and research amidst the ongoing challenges of the COVID-19 pandemic.

I would like to extend my grateful thanks and admiration to my colleagues for their exceptional response to difficult circumstances and for the outstanding support the College has provided to our students over the past year.

Despite the considerable challenges of the pandemic, the College enjoyed many notable successes across the year. In October, in

€10m

in funding secured from the Higher Education Authority's Human Capital Initiative in a collaborative partnership with NCAD and IADT

collaborative partnership with NCAD and IADT, the College secured €10 million funding from the Higher Education Authority's Human Capital Initiative (Pillar 3, Innovation and Agility) to develop a Creative Futures Academy across the three institutions. The Creative Futures Academy, directed by Associate Professor PJ Mathews, UCD School of English, Drama and Film, will prepare graduates for work in a major sector of the national economy and support the early and mid-career needs of creative professionals in what are fast-changing social, economic and technological contexts. This exciting project will be developed with input from key industry partners and national cultural bodies (such as the Arts Council, RTÉ, Screen Producers Ireland and the Design and Crafts Council of Ireland) to nurture world-class talent and shape the future of Ireland's creative sector. In the first of a series of new appointments to the Creative Futures

Academy, Dr Nicolas Pillai has been appointed as Assistant Professor in Creative and Critical Practice.

The College continued its success in securing prestigious European Research Council Funding for arts and humanities research. In April, Professor Kathleen James-Chakraborty, UCD School of Art History and Cultural Policy was awarded the ERC Advanced Grant of over €2 million for her project 'Expanding Agency: Women, Race and the Global Dissemination of Modern Architecture'. Professor James-Chakraborty's ground-breaking project will explore the role that women and members of ethnic minorities, primarily African-Americans, played in transmitting modern architecture and design internationally, including within Europe, between 1920 and 1970. Professor James-Chakraborty was also the recipient of the Ailsa Mellon Bruce Senior Fellowship for 2021-2022 at the Center for Advanced Study in the Visual Arts (CASVA), National Gallery of Art, Washington DC.

€2m

in grant funding was awarded to Professor Kathleen James-Chakraborty for her project 'Expanding Agency: Women, Race and the Global Dissemination of Modern Architecture

// Associate Professor Catherine Cox, UCD School of History was announced as overall winner of the UCD 2020 Research Impact Case Study Competition for her study, entitled 'Out of sight, out of mind: changing public perceptions of the mental health crisis in Irish prisons' //

In keeping with the aims of the Arts and Humanities Research Strategy 2020-2024, the College also excelled in the impact of its research this year. In March, Associate Professor Catherine Cox, UCD School of History was announced as overall winner of the UCD 2020 Research Impact Case Study Competition for her study, entitled 'Out of sight, out of mind: changing public perceptions of the mental health crisis in Irish prisons', which explores the history of prisoner health. This is the second year in a row that the College takes this top accolade and demonstrates not only the excellence but also the contemporary relevance of arts and humanities research.

Faculty from across the College, both past and present, received a variety of external recognition demonstrative of high esteem and achievement. In May, Professor John Brannigan, UCD School of English,

Above left: Professor Kathleen James-Chakraborty, UCD School of Art History and Cultural Policy and right: Associate Professor Catherine Cox, UCD School of History.

College structure

Associate Professor Gillian Pye
Associate Dean for Arts and Humanities

Professor Jaime Jones
Deputy Associate Dean for Arts and Humanities

Dr Joseph Twist
Vice-Principal for Equality, Diversity and Inclusion

Dr Kelly Fitzgerald
Vice-Principal for Global Engagement

Associate Professor Lucy Collins
Vice-Principal for Graduate Studies

Associate Professor Jorie Lagerwey
Vice-Principal for Teaching and Learning

Associate Professor Ivar McGrath
Vice-Principal for Research, Innovation and Impact

UCD College of Arts and Humanities consists of seven schools:

Associate Professor Emily Mark-Fitzgerald
Head of School, UCD School of Art History and Cultural Policy

Dr Martin Brady
Head of School, UCD School of Classics

Professor John Brannigan
Head of School, UCD School of English, Drama and Film

Professor William Mulligan
Head of School, UCD School of History

// The College continues to innovate in its postgraduate curriculum and this year welcomed the launch of a new MA in Journalism and International Affairs, a collaboration between the CNN Academy and the UCD Clinton Institute //

Drama and Film and Associate Professor Meidhbhín Ní Úrdail, UCD School of Irish, Celtic Studies and Folklore were elected to the Royal Irish Academy, the highest academic honour in Ireland for their research and important scholarly achievements. Emeritus Professor Mary E Daly was presented with a Royal Irish Academy Gold Medal, the highest scholarly accolade in Ireland. Following a nomination to the North/South Language Body Board, initiated by the Irish Government, Irish language expert Professor Regina Uí Chollatáin, Head of UCD School of Irish, Celtic Studies and Folklore was appointed as the new Chair of Foras na Gaeilge. Professor Robert Gerwarth, UCD School of History was awarded a Leverhulme Visiting Professorship in Oxford for 2021/22, where he will deliver the 'Leverhulme Lectures on the History of Civil Wars' series at Oxford, Edinburgh, and Queen's University Belfast. Professor Paul Rouse, also UCD School of History was awarded a Fulbright Scholarship at the City University of New York (CUNY) based at the Public Space Research Group for the project 'Recreation in Dublin's Phoenix Park and New York's Central Park, 1850-1950'.

In December, the College extended warm congratulations to the recipients of the College Teaching and Learning Awards which reflect the exceptional dedication to teaching and the student experience from across the College, particularly the support given to students throughout this extraordinary year. Congratulations to the winners: Assistant Professor Christopher Farrell, UCD School of Classics; Associate Professor Lucy Collins, Assistant Professor Paul Halferty and Professor Emilie Pine, UCD School of English, Drama, and Film; Associate Professor Ursula Fanning, UCD School of Languages, Cultures, and Linguistics; Assistant Professor Ciarán Crilly and Associate Professor Wolfgang Marx, UCD School of Music; Eoin McEvoy, UCD School of Irish, Celtic Studies, and Folklore; Professor Robert Gerwarth, Associate Professor Conor Mulvagh and Assistant Professor Elizabeth Mullins, UCD School of History.

The College continues to innovate in its postgraduate curriculum and this year welcomed the launch of a new MA in Journalism and International Affairs, a

Dr Nicolas Pillai has been appointed as Assistant Professor in Creative and Critical Practice in the Creative Futures Academy.

College structure

Professor Regina Uí Chollatáin
Head of School, UCD School of Irish, Celtic Studies and Folklore

Professor Bettina Migge
Head of School, UCD School of Languages, Cultures and Linguistics

Dr Ciarán Crilly
Head of School, UCD School of Music

As at 1 September 2020

collaboration between the CNN Academy and the UCD Clinton Institute, led by the Clinton Institute's Director, Professor Liam Kennedy. This programme is the first English-language Masters collaboration by CNN with a university partner and combines world-leading training in journalism with academic expertise in global relations and international affairs.

The College was delighted to welcome the internationally acclaimed novelist and scholar Sarah Moss to UCD School of English, Drama and Film as Assistant Professor in Creative Writing. The 2020/21 UCD Writer in Residence was author Niamh Campbell, winner of the 2021 Rooney Prize for Irish Literature, who programmed and hosted Conversations with the Contemporary, an event exploring the craft and context of

writing with a diverse panel of writers and poets. The 2020/21 Craig Dobbin Chair in Canadian Studies was Professor Renée Hulan from Saint Mary's University, Canada who worked closely with faculty and students in the UCD Centre for Canadian Studies and the Ireland Canada University Foundation.

In November the College was proud to announce business leader Dalton Philips as the 2020 UCD Alumni Awards for Arts and Humanities. He is the chief executive of the Dublin Airport Authority and also a member of the UCD Arts and Humanities Alumni Advisory Group.
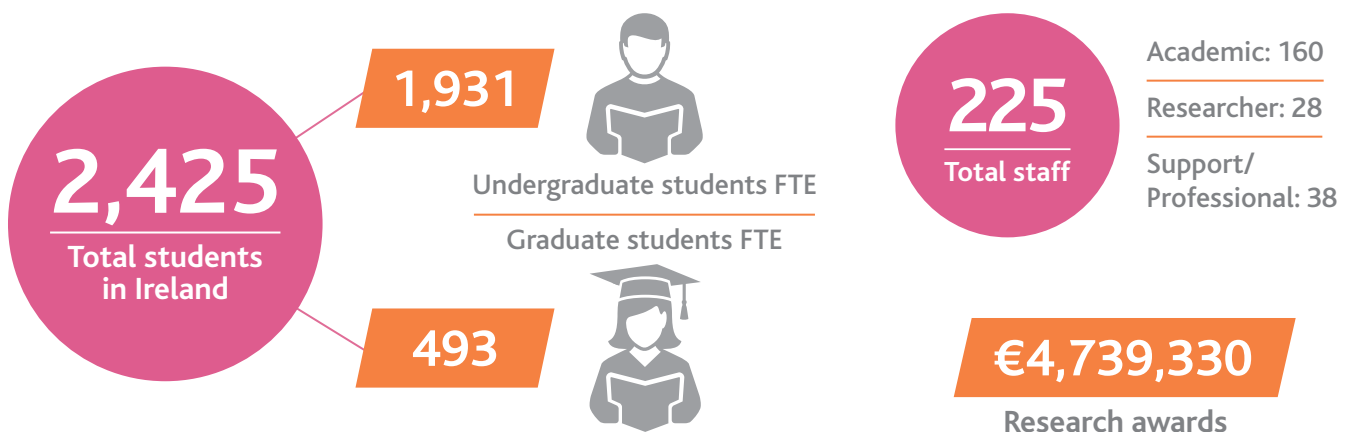
The College was pleased to announce the establishment of the UCD College of Arts and Humanities Support Fund. The Support Fund is designed to align donor funding with the specific strategic aims of the College and thanks to the generosity of our donors the Fund has already been able to advertise student and creative bursaries, and to secure archival acquisitions for the UCD Cultural Heritage collections for the upcoming academic year.

Professor Sarah Prescott
College Principal and Dean of Arts and Humanities

Dalton Philips, chief executive of the Dublin Airport Authority (DAA) was the recipient of the 2020 UCD Alumni Awards for Arts and Humanities.

2,425
Total students in Ireland

1,931
Undergraduate students FTE

Graduate students FTE

493

225
Total staff

Academic: 160

Researcher: 28

Support/ Professional: 38

€4,739,330
Research awards

Prof Gerardine Doyle led the UCD Leadership in Healthcare Network virtual Conference – *Leadership during a Pandemic,* in collaboration with RCPI. The event examined the first wave of COVID-19 in Ireland from both a healthcare delivery and organisational standpoint, and examined the economic fallout. Prof Doyle is pictured with Prof Mary Horgan, President, Royal College of Physicians of Ireland.

COLLEGE OF BUSINESS

Professor Anthony Brabazon
College Principal and Dean of Business

Emphasis on connection and evolution in leadership emerged as key themes throughout this academic year as creative solutions in engagement and research delivered on a global stage.

The year started by bringing together health and business leaders to examine the first wave of COVID-19 in Ireland from both a healthcare delivery and organisational standpoint, and to examine the economic fallout. The virtual conference, *Leadership during a Pandemic,* was developed by Professor Gerardine Doyle and the alumni-led UCD Leadership in Healthcare Network in collaboration with RCPI. The event highlighted the renewed emphasis we all place on the University's strategic priority of *Building a Healthy World*.

Student Experience
Despite the impact of COVID-19 restrictions during the year, our students excelled on the world stage by participating in competitions where they could benchmark themselves against international peers.

A group of UCD students, captained by Aoife Cunningham, BComm International, represented Ireland at the ENGCOMM 2021 Case Competition based in Canada, scooping four top awards and placing second overall.

UCD Quinn School students also took top prizes at the new, virtual UConn Case Competition with Leona Xin Chen awarded best presenter in the preliminary round and Ruairi McCormack awarded best presenter in the final round.

At UCD Smurfit School, students and alumni launched *UCD Smurfit Women, Inspiring More,* an organisation designed to promote the continued strong trajectory of women from education to industry and to address issues of gender equity. Supporting the University's strategic priority of *Empowering Humanity,* the initiative is designed to raise awareness

of the challenges that women face in the move from education to the professional environment.

Several conferences explored themes of international business including the *UCD Africa Business 2021 Conference* which welcomed panellists including Her Excellency Yolisa Maya, South African Ambassador to Ireland; His Excellency Eshetu Hordofa, Ethiopian Ambassador to Ireland; and Dr David Nyaluke, UCD-PMIA Fellow in Business and Development. The panel discussed how African philosophies played out in their home countries and how they emerge in business in response to COVID-19 and beyond.

Five current students and alumni of the College participated in the Olympic games: Hannah McLoughlin and Chloe Watkins – Hockey; Eimear Lambe – Rowing; Billy Dardis, Gavin Mullin, Adam Leavy – Rugby 7s, with the highlight achievement being Eimear Lambe's bronze medal as part of the Women's Four boat at the Sea Forest Waterway. Congratulations also to our Paralympians who represented Ireland in Tokyo: Patrick Flanagan – Swimming and Kerrie Leonard – Archery.

College Developments

As we adapt to changing business and societal trends, the new Modular Executive MBA programme was launched specifically for those with busy professional and personal schedules who place a premium on flexibility, including candidates who work outside Dublin and those with carer responsibilities.

Also new to our portfolio during the year was the MSc in Financial Data Science programme. Aimed at equipping students for a career addressing the growing need for data science expertise in business, including fintech technologies, the development of this programme highlights how our lives are *Transforming Through Digital Technology* – a strategic priority for the University.

In addition, the School is participating in UCD's new BSc in Sustainability, offering a programme track which covers the business and economics of sustainability.

UCD Quinn School students led on the world stage taking top prizes at the new, virtual UConn Case. Ruairi McCormack was awarded best presenter in the final round.

In Memoria

This past academic year, we mourned the loss of two dear colleagues, Dr Laurence G Crowley CBE, founding Chairman of the UCD Smurfit School, and Professor Eamonn Walsh, PwC Professor of Accountancy.

Dr Laurence Crowley was an esteemed and inspiring member of the UCD community, as well as the Irish and international business communities. Appointed as UCD Smurfit School's first chairman in 1990, his leadership, commercial awareness and unwavering belief in the power of teams laid the foundations for the School to receive global recognition as Ireland's leading business school. Laurence had an outstanding belief in the transformative power of education and the role it played in the enabling of future talent. The development of business education in Ireland owes a great deal to him as his vision provided the pathway for the School to thrive and flourish.

For over 30 years, **Professor Eamonn Walsh's** academic leadership and standing in the field of accountancy spanned the globe, from Asia to North America and back to Europe. His brilliance from the lectern, and his dedication to his role as an educator, inspired a generation of students ranging from those just beginning their business studies to experienced professionals studying for their MBA. He was equally at home engaging with Irish and global business leaders on challenges of organisational and societal importance. Eamonn was an academic of truly global standing, and he played a highly significant role in advancing business education in Ireland to the forefront of the international stage. Beyond his own scholarship and academic leadership, Eamonn was devoted to his students and inspired and influenced many.

Continuing our investment for the future, refurbishment was undertaken on the Smurfit campus to add additional teaching and student study space. Supporting both our research and teaching activities, a new behavioural laboratory was also created.

Research, Innovation and Impact

Faculty in the College adapted their research agendas in response to the COVID-19 crisis and over the course of the year, the ERC MISFIRES project, UCD Centre for Business and Society, faculty and researchers highlighted their work at research mornings and research symposia on the impact of the pandemic across society. Topics ranged from Professor Niamh Brennan, Victoria Edgar and Sean Power's report on *COVID-19 Profit Warnings: Delivering Bad News in a Time of Crisis* to Assistant Professor Julie Schiro's

College structure

Professor Gerardine Doyle
Associate Dean and Director
of UCD Smurfit School

**Associate Professor
Maeve Houlihan**
Associate Dean and Director
of UCD Quinn

Professor Don Bredin
Associate Dean International

Helen Brophy
Director of UCD Smurfit
Executive Development

Professor Donna Marshall
Vice-Principal of Research,
Innovation and Impact Professor

Professor Séamas Kelly
Vice-Principal of Teaching
and Learning

Professor Andreas Hoepner
Vice-Principal of Equality,
Diversity and Inclusion

As at 1 September 2020

investigation of *Social Distancing & Mask-wearing in Response to COVID-19.*

Assistant Professor Alessia Paccagnini, Professor Valerio Poti and Professor Andreas Hoepner hosted the largest EU Research Group on Fintech, Cryptocurrencies and Cybersecurity as part of the FIN-TECH Horizon2020 project. *D3FSC on Risk in Blockchain and Cryptocurrencies* addressed rapid changes in the industry with academics from the world's leading business schools.

In addition to maintaining a strong level of research outputs, faculty were successful in securing a wide range of external funding awards. Professor Michael O'Neill was part of a successful research consortium bid for significant funding under the Government's 'Disruptive Technologies Fund' for the *GUARD project* which will develop 'smart' drones

// UCD College of Business has continued to enhance its reputation as an international leader of relevant and impactful business research and deliver world-class business education //

using artificial intelligence techniques for the detection of drug smuggling.

Professor John Cotter and colleagues secured funding for the continuation of the SFI-industry funded *Valuation & Risk Partnership,* as well as for their work with SFI ADAPT Research Centre.

A number of research grants were awarded to Professor Andreas Hoepner which support the University's strategic theme of *Creating a Sustainable Global Society* including the Climate KIC project, *COVID Call – Future-proof finance for resilience and adaptation,* as well as awards from the Swedish Foundation for Strategic Environmental Research and from the Irish Research Council for work done in collaboration with Dr Theodor Cojoianu.

Professor Roland Erne and colleagues were successful in their application for a Marie Skłodowska-Curie Action Grant for *Contesting Governance by Numbers: The Mobilizations of Food Delivery Couriers across Europe in Time of the Pandemic,* and an additional grant from the Education Audiovisual & Culture Executive Agency (EACEA) for the project *Transnational political contention in Europe (TraPoCo).*

Professor John Geary was also awarded funding for a national study on the workplace response to COVID-19, and Professor Anne Keegan secured funding from the Irish Research Council for the project, *Implementing Workplace Well-being Programmes: A view from Institutional Theory.*

Awards and Appointments

Faculty were honoured for their work with prestigious awards and appointments including Professor Niamh Brennan receiving the Irish Academy of Management Fellowship for her marked and noteworthy contribution to the discipline and practice of management in Ireland.

Professor Gerardine Doyle was elected as President of the European Institute of Advanced Studies in Management (EIASM), Professor Donna Marshall became the first Irish President of the International Purchasing and Supply Education and Research Association (IPSERA) and Dr María Jesús Belizón was invited to join the Research Board of HR Analytics ThinkTank—the first academic-industry led initiative of its kind.

Associate Professor Ciaran Heavey and Associate Professor Dorota Piaskowska

Leaders from our alumni, board, faculty and wider business network, including Prof Anthony Brabazon and alumna Breege O'Donoghue, featured in the award-winning UCD Business Impact podcast, which exemplifies the breadth and depth of expertise in our community. With over 20,000 listens in the first season, the podcast not only explored the economic impacts of the pandemic, but demystified emerging trends like crypto currencies and AI in finance, to name but a few.

won the Strategy and General Management Category at The 2021 Case Centre Awards for their study, *Ryanair: Flying Too Close to the Sun?*.

Rankings and Accreditations

UCD College of Business has continued to enhance its reputation as an international leader of relevant and impactful business research and to deliver world-class business education.

The College was awarded five-year EQUIS re-accreditation and recognised in the top 1% of business schools globally. UCD Smurfit School also retained membership in the prestigious Global Network for Advanced Management (GNAM) for the standard three year term of membership.

Additional noteworthy awards include the QS World University Rankings of 13th for the Masters in Supply Chain Management, 28th for the Masters in Marketing, 27th for the Masters in Business Analytics, a global Financial Times ranking of 3rd for the MSc International Management, and the Executive MBA programme global ranking of 72nd.

Smurfit Executive Development was recognised with the InBUSINESS Recognition Award for Best in Executive Education in 2020 to acknowledge their work in designing and delivering impactful learning experiences to business executives.

Alumni

The College saw new engagement with our alumni community including growth in our UCD Quinn School Mentoring Programme which now has over 150 student participants, while UCD Smurfit School's GLP Mentoring Programme for Masters students has over 100 students all benefitting from the experience of our active alumni around the globe.
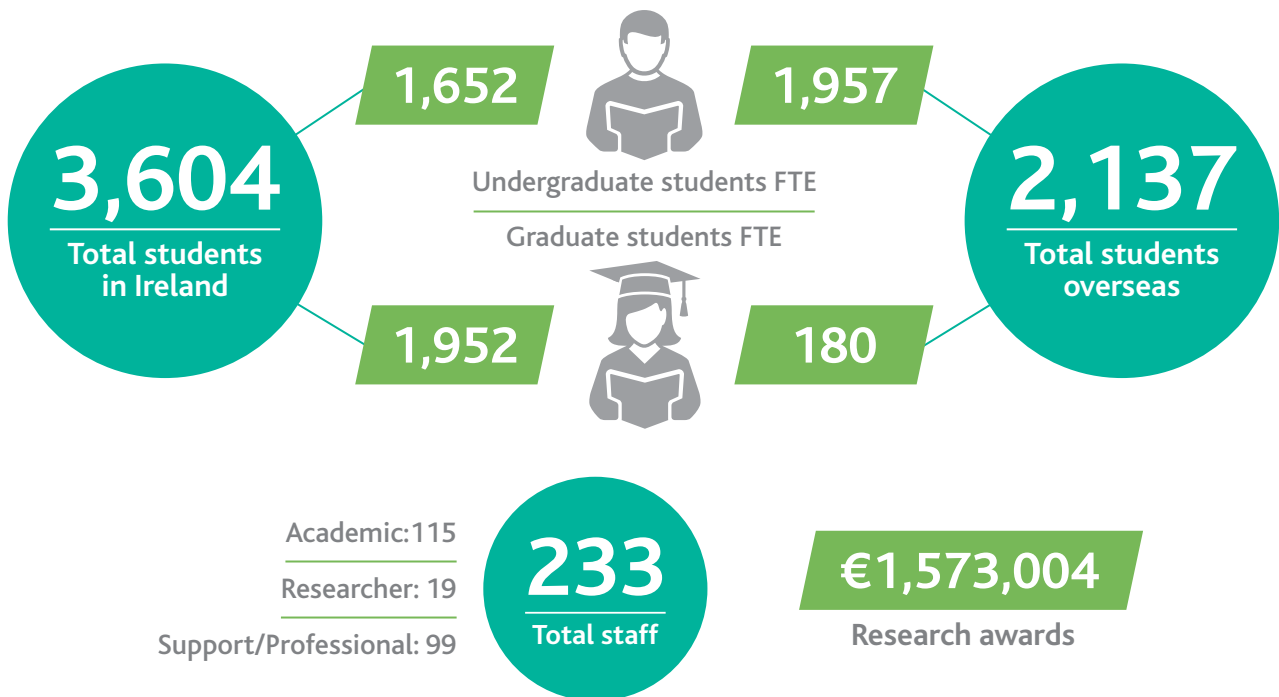
This international network came together to launch the first UCD Business Alumni Challenge which saw over 900 participants support the physical, mental and nutritional well-being of our community by individually taking part in a well-being challenge for 30 days.

Looking Forward

As we emerge from the challenges brought by the pandemic, we are inspired by the perseverance of our students, faculty and staff to succeed through dramatic, global and personal changes. I would like to warmly thank all College staff, faculty, students and advisory board members for their outstanding efforts in adapting to the challenges posed by COVID-19 during the year.

Professor Anthony Brabazon
College Principal and Dean of Business

3,604
Total students in Ireland

1,652
Undergraduate students FTE

1,957

2,137
Total students overseas

Graduate students FTE

1,952

180

Academic: 115
Researcher: 19
Support/Professional: 99

233
Total staff

€1,573,004
Research awards

Dr Orla Murphy (APEP) and EU Commission President, Ursula von der Leyen, attending the first 'in-person' European Bauhaus Roundtable meeting.

COLLEGE OF ENGINEERING AND ARCHITECTURE

Professor Aoife Ahern
College Principal and Dean of Engineering

Rising successfully to the challenges of the COVID-19 pandemic, the College continued to deliver its programmes, engage with its community and partners, and lead in ground-breaking research.

I am proud of our community of faculty, staff and students, who have shown tremendous courage, dedication and resilience throughout this difficult period.

Enabling works commenced on the College's new Centre for Creativity, a key element of UCD's Future Campus development plan. Dr Ciaran McNally was appointed Vice-President for Development with a lead role in ensuring that development of both teaching and research will be facilitated by our College's infrastructure.

Education and Student Experience
Despite limited opportunities for face-to-face teaching, some on-campus studios and laboratories went ahead and new ways of

enhancing our students' online learning were explored, such as use of drone technology for fieldwork in APEP, and significant video support materials to reproduce aspects of engineering laboratory experiences.

In 2020/21 the College offered additional CAO places across our undergraduate programmes which continued to enjoy high first preferences.

At graduate level and aligned with the University's Strategic Plan:
- The MSc Architecture, Urbanism and Climate Action was launched to equip graduates and returning professionals with specialist skills to respond to the challenge of planning, designing and actioning a sustainable built environment.

- Under the HEA Human Capital Initiative, in January 2021, UCD Engineering introduced a suite of Professional Diplomas, to support the national campaign to develop priority skills needs.

Cognisant that the pandemic affected our students in many unforeseen ways, the College offered a special COVID-19 Hardship Fund under which 48 awards were made. Also, substantial donor funding was secured to expand and continue the Réalta ME scholarship programme which supports engineering students in their fifth year of study. The College is extremely grateful to the generosity of its donors.

Congratulations to teaching staff awarded University Teaching and Learning awards:
- Individual Teaching Excellence:
  – Dr Neal Murphy (MME)
  – Emmett Scanlon (APEP)
- Outstanding Contribution to Student Learning:
  – Architectural Design VII 'Open Heart City' Staff (APEP)

Congratulations to Associate Professor Samantha Martin-McAuliffe (APEP) who was named a Mellon History Teaching Fellow at Dumbarton Oaks, USA.

Engagement and Outreach
The College's engagement and recruitment efforts have continued successfully over the last 12 months with staff finding innovative ways to engage and recruit students and partners both domestically and internationally by leveraging video content, remote tools, online platforms and hosting virtual events.

From our weeklong 'Engineering Your Future' programme designed to inspire transition year students to study engineering, our architecture and planning summer school, taught graduate webinar series, through to our international alumni showcase events, recruitment numbers across the College have remained strong. Additionally, new partnerships have been explored and developed both in France and India.

The UCD Engineering Graduates Association events commenced in September 2020 with the Gold Medal and Award Ceremony, at which students were recognised for excelling in their disciplines. The Autumn Panel Discussion, 'The Future of the Pharmaceutical and Biopharmaceutical Industry in Ireland', was held in October. The Annual General Meeting saw the election of President, Mr Donal Wyse, bringing considerable expertise to the role. Ms Majella Henchion's successful presidency concluded, and her leadership is gratefully acknowledged. The Spring Panel Discussion, 'Inclusive by Design: Applying Inclusive Design Methods to Engineering', took place in May 2021. The Gold Medal and Award Ceremony took place once more in August 2021.

Research, Innovation and Impact
The College's long-established record for research, innovation and impact continues to grow with €25.6m new funding awarded, 19% of the University's research funding, comprising many prestigious awards from highly competitive programmes. We acknowledge the Higher Education Authority's support enabling researchers and postgraduate students to continue their research and studies during COVID-19 disruptions.

Phase-2 funding awarded for national Research Centres include: iCRAG SFI Research Centre for Applied Geosciences, involving Professor Mike Long and members of CE; SFI Connect Centre, involving Professors Anding Zhu, Robert Staszewski, Associate

€25.6m
in new funding awarded, 19% of the University's research funding, comprising many prestigious awards from highly competitive programmes

The Stage 1 Architecture Class Orientation pictured at Richview.

College structure

Associate Professor David Timoney
Associate Dean of Engineering and Vice-Principal for Teaching and Learning

Professor Mark Scott
Dean of Architecture, Planning and Environmental Policy

Dr John Healy
Vice-Principal for Equality, Diversity and Inclusivity

Professor Ravi Thampi
Vice-Principal for Internationalisation

Professor John Sheridan
Vice-Principal for Research, Innovation and Impact

UCD College of Engineering and Architecture consists of six schools:

Associate Professor Eoin O'Neill
Head of School, UCD School of Architecture, Planning and Environmental Policy (APEP)

Professor Colm O'Donnell
Head of School, UCD School of Biosystems and Food Engineering (BFE)

Professor Eoin Casey
Head of School, School of Chemical and Bioprocess Engineering (CBE)

Associate Professor Amanda Gibney
Head of School, School of Civil Engineering (CE)

Professor Peter Kennedy
Head of School, School of Electrical and Electronic Engineering (EEE)

Professor Kenneth Stanton
Head of School, UCD School of Mechanical and Materials Engineering (MME)

As at 1 September 2020

Dr Paul Cuffe (seated front left), recipient of the 2021 NovaUCD Innovation Champion of the Year Award, and co-founder of Joyst Instruments Ltd with engineering student Philip Snell (seated front right) and UCD ME graduates, (standing l-r) Edward Byrne and William Langrell.

// COVID-19 research continues, with two new SFI's COVID-19 Rapid Response projects awarded //

Professor Elena Blokhina, Dr Barry Cardiff (EEE); Enterprise Ireland Dairy Processing Technology Centre, involving Professors Colm O'Donnell, Aoife Gowen, Associate Professor Tom Curran (BFE); BiOrbic Bioeconomy SFI Research Centre, involving Dr Fionnuala Murphy (and members of BFE), awarded the SFI Future Innovator Prize for 'Farm Zero C: Creating a carbon neutral resilient dairy farm'; SFI SSPC Research Centre, involving Dr Steven Ferguson (and members of CBE), awarded the EPSRC-SFI Centre for Doctoral Training in Transformative Pharmaceutical Technologies; and Dr Steven Ferguson's LICORICE team also received a SFI Future Innovator prize under the zero-emissions challenge.

Other substantial funding awards include: SFI Frontiers for the Future projects to ERC Consolidator Grant awardee, Professor Dimitrios Zevgolis (MME), and Professor Peter Kennedy (EEE); SFI Research Infrastructure award for Professor Aoife Gowen (BFE); and a European Commission climate action project awarded to Associate Professor Francesco Pilla (APEP).

COVID-19 research continues, with two new SFI's COVID-19 Rapid Response projects awarded: Professor Aoife Gowen (BFE), to apply surface engineering to PPEs; Associate Professor John O'Sullivan (CE) to develop an integrated system for all-island SARS-CoV-2 wastewater surveillance and reporting.

The 2021 NovaUCD Spin-out of the Year Award was received by Professor R Bogdan Staszewski (EEE) who co-founded Equal1 Labs to develop a new type of quantum computer based on the latest advances in semiconductor CMOS technology. Dr Paul Cuffe (EEE) received the 2021 NovaUCD Innovation Champion of the Year Award for his commercialisation work, including co-founding spin-out Joyst Instruments Ltd with student Philip Snell and UCD ME graduates, William Langrell and Edward Byrne. Luis Alejandro Vergara, PhD student (BFE) supervised by Dr Fionnuala Murphy and founder of agtech start-up Carbon Harvesters, won the Young Innovator prize at the 2021 Enterprise Ireland Innovation Arena Awards.

Other new spin-outs include seamlessCARE, founded by Dr Aviva Cohen, Ian Kennedy and Dr Cagri Cubukcu (MME), developing a digital care platform to support people with intellectual disability and dementia. AquaB Nanobubble Innovations Ltd. founded by Professor Niall English and Dr Mohammad Reza Ghaani (CBE), won the prestigious 2020 IChemE Global Award. We also congratulate:

- Three faculty (BFE) listed by Clarivate Analytics in the top 1% of the most cited researchers in the world for their fields: Professor Da-Wen Sun and Professor Colm O'Donnell (sixth time listed) and Professor Paula Bourke, Ad Astra Fellow, the first UCD female listed.
- Dr Colin Keogh (MME) received the IRC Impact Award 2020 for developing open-source ventilators, and as co-founder of Sapien Innovation and The Rapid Foundation.
- Professor Aoife Ahern (CE), College Principal, elected as a Fellow of the Irish Academy of Engineers and appointed, by Presidential Invitation, to Fellowship of Engineers Ireland.
- Professor Peter Kennedy (EEE), world expert in wireless communications and immediate past President of the Royal Irish Academy, awarded an Honorary Degree from Queen's University Belfast.
- Dr Orla Murphy (APEP), appointed to the EU New European Bauhaus high-level roundtable, launched by Ursula von der Leyen, EU Commission President, on using design to improve quality of life.

I commend all College members on their achievements.

Professor Aoife Ahern
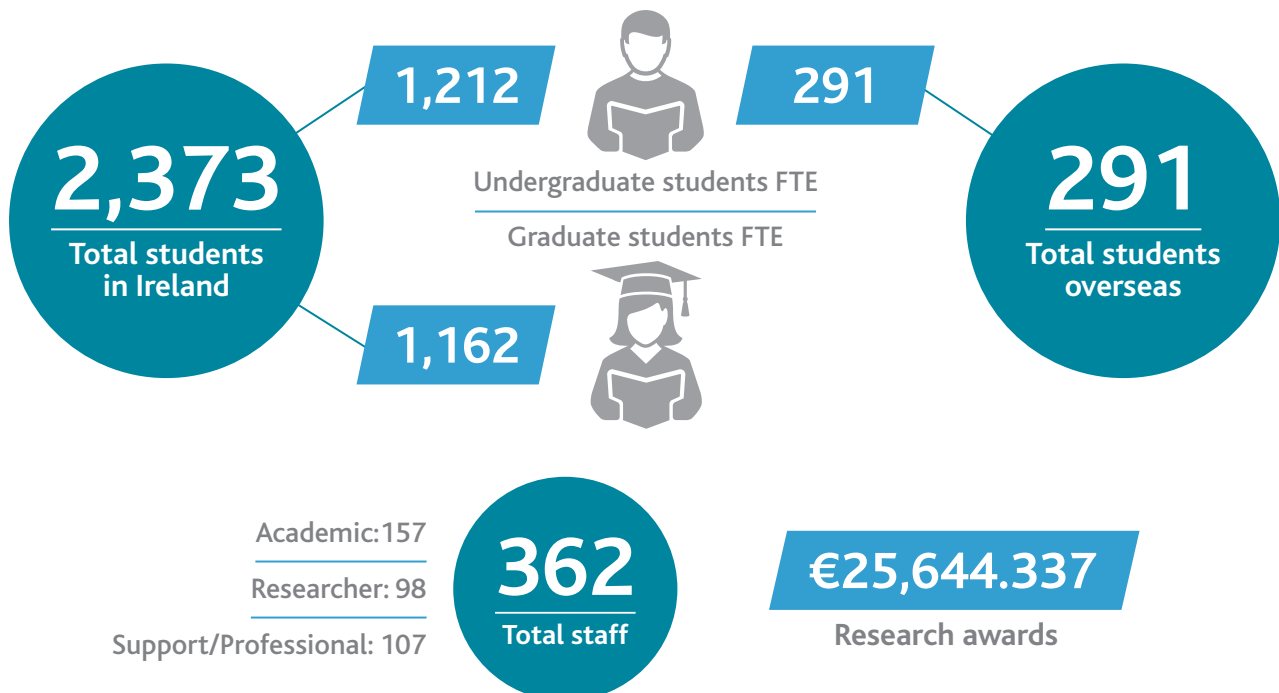College Principal and Dean of Engineering

Aoife Carney RIP

The sudden death of Aoife Carney in March of this year was a huge blow to the School of Chemical and Bioprocess Engineering, where Aoife was School Administrator, and to the wider Engineering and Architecture community, where she was a valued and much-loved colleague.

Aoife, who joined the School in 1999, served as School Administrator for 22 years, one of only two people to hold the position in the 65 years of Chemical Engineering at UCD. As the face of the School to students and visitors, she will always be remembered for creating and fostering a genuine sense of community, imbued with her care and brilliance. That she did this with such good humour and affection made her the most loved member of the School. Her death has been harder to take as a result. She will be greatly missed by all her friends in UCD and by the many former and current students that she helped over the last 22 years.

Ar dheis Dé go raibh a hanam dílis séimh.

2,373
Total students in Ireland

1,212
Undergraduate students FTE

1,162
Graduate students FTE

291

291
Total students overseas

Academic: 157
Researcher: 98
Support/Professional: 107

362
Total staff

€25,644.337
Research awards

Prof Cecily Kelleher, College Principal, and members of the Lifeways Research Project, which is in its twentieth year: (l-r) Beth Kilkenny, Assoc Prof James Matthews, Prof Cecily Kelleher, Dr Ricardo Segurado, Shevaun Teo and Dr Alex Douglass.

COLLEGE OF HEALTH AND AGRICULTURAL SCIENCES

Professor Cecily Kelleher
College Principal

UCD College of Health and Agricultural Sciences (CHAS) reports a successful year in 2020/21, recognising the continued efforts of faculty and staff across the college in responding to the COVID-19 pandemic.

The College committees, chaired by our Vice-Principals, continue to provide fora for cross-cutting initiatives and sharing of knowledge and expertise. A number of conferences and events took place during the year to showcase these activities.

This year CHAS awarded Teaching and Learning Awards to sixteen individual winners in the Teaching Excellence Category and three team winners in the Outstanding Contribution Category. In April 2021 our Education and Training Group hosted an online showcase of the nine winners from CHAS of the University level awards.

We also welcomed 19 Ad Astra Fellows during this academic year, as well as other key reactive and strategic appointments under the scheme.

In December 2020 the CHAS Neuro-diversity Group co-hosted a conference on Neurodiversity in Third Level Education. The conference took place online over two days with keynote speakers and attendees from across the globe.

Disciplines within CHAS continue to rank highly internationally:
• UCD Agricultural Sciences was ranked 24th in the 2021 US News & World Report's

Best Global University rankings while research in Agricultural Science at UCD was number one globally in terms of the number of highly cited papers listed among the top 1% most cited.

- UCD was ranked 34th in the QS World University Subject Rankings for Sports Related Subjects in 2021. The MSc in Sports Management at the SPHPSS ranked 34th globally and 11th in Europe, by Sport Business International.
- The UCD School of Veterinary Medicine moved up nine places in the QS World University Rankings by Subject in 2021 and is now ranked 23rd in the world for Veterinary Science. The School is now positioned as the highest ranked subject in UCD and first in Ireland overall.

The UCD Centre for Precision Surgery in the UCD School of Medicine won Surgical Advancement of the Year category at the 2020 Irish Healthcare Awards. The awards, created by the Irish Medical Times, are now in their 20th year and recognise innovation and excellence across the Irish healthcare sector. Digital Surgery, led by Professor Ronan Cahill, Professor of Surgery, in conjunction with Dr Kevin Nolan, UCD School of Mechanical and Materials Engineering are leading academic partners on €2.4 million EU funding to support critical new surgical technologies for COVID-19.

// The UCD Centre for Precision Surgery, in UCD School of Medicine won Surgical Advancement of the Year category at the 2020 Irish Healthcare Awards //

24th

place ranking in the 2021 US News & World Report's Best Global University rankings for UCD Agricultural Sciences

Professor Thilo Kroll, UCD School of Nursing, Midwifery and Health Systems has led a cross-college collaboration to secure the central role of CHAS in the development of a national network for public and patient involvement in health and social care research (PPI Ignite). This involves co-sponsorship funding from the Health Research Board and UCD Research.

Researchers in UCD School of Public Health, Physiotherapy and Sports Science are testing innovations to promote student well-being, learning experiences and graduate outcomes across two projects. The FLOURISH project, led by Dr Denise McGrath and Dr Ciara Duignan, is researching digital tools to support students' well-being and personal development through an elective module. The CHAMELEONS H2020 project, led by Associate Professor Tara Cusack, is developing innovative educational interventions to improve the PhD learning experience. In 2021, two interdisciplinary, online modules for students across five institutions in Europe were delivered.

Professor Lisa Katz, UCD School of Veterinary Medicine and Professor Emmeline Hill, UCD School of Agriculture and Food Science have been awarded over €880,000 for a five-year research

Prof Emmeline Hill, UCD School of Agriculture and Food Science and Prof Lisa Katz, UCD School of Veterinary Medicine will be investigating the dynamic interplay that exists between the inherited DNA sequence of a horse and the environment.

College structure

Professor David MacHugh
Vice-Principal for Research
Innovation and Impact

Associate Professor Pat Felle
Vice-Principal for International

**Associate Professor
Sue Rackard**
Vice-Principal for Teaching
and Learning

Professor Tim Lynch
Vice-Principal for Health Affairs

Professor Torres Sweeney
Vice-Principal for Equality,
Diversity and Inclusion

Professor Alex Evans
Head of School and Dean of
Agriculture, UCD School of
Agriculture and Food Science

Professor Michael Keane
Head of School and Dean,
UCD School of Medicine

Professor Gerard Fealy
Head of School and Dean of
Nursing, School of Nursing,
Midwifery and Health Systems

Professor Catherine Blake
Head of School and Dean of
UCD School of Public Health,
Physiotherapy and Sports
Science

Professor Michael Doherty
Head of School and Dean,
UCD School of Veterinary
Medicine

As at 1 September 2020

project to investigate the dynamic interplay that exists between the inherited DNA sequence of a horse and the environment; the UCD research team is a world leader in the development of genetic tests for racehorses.

Programmes across CHAS continue to adapt to requirements brought on by the pandemic, particularly in healthcare delivery.

UCD School of Medicine continued to offer over 40+ programmes at graduate level for HCPs and others working in healthcare settings. Due to market demand the School was also pleased to introduce new graduate taught programmes for the 2020/21 academic year in AI, Precision Medicine, Primary Care and Neurodiversity.

UCD School of Nursing, Midwifery and Health Systems has responded to the demands of the pandemic with the ongoing rolling registration of an online Foundations Critical Care Module with the HSE to upskill critical care nurses.

Following a 2020 visit, the Royal College of Veterinary Surgeons (RCVS) has granted the status of Full Accreditation to UCD's Bachelor of Veterinary Medicine (MVB) programme. UCD's programme in Veterinary Medicine is now accredited by the American Veterinary Medical Association (AVMA), the Australasian Veterinary Board Council (AVBC), the

European Association of Establishments for Veterinary Education (EAEVE), RCVS and the Veterinary Council of Ireland.

Agri Aware and UCD School of Agriculture and Food Science assisted Leaving Certificate agricultural science students by developing a new curriculum-linked experiment video series to aid them in their studies in response to the challenges of school closures and changes to the agricultural science curriculum during COVID-19. The Essential Experiments series contains experiments that cover mandatory Leaving Cert agricultural science experiment topics such as soils, milk quality and crop science and were developed by academic staff at the School.

The Medical Graduate Awards are presented to outstanding UCD School of Medicine alumni every year in recognition of lifelong achievements in medical education, research and/or clinical practice. In 2021, award recipients were Dr Paul O'Byrne (1975) Respirologist and Dean, McMaster University, Ontario; Sr Marian Scena (1975) Doctor and Coordinator, Faraja Hospice and Palliative Care Centre, Tanzania; and Dr John Donohue (1967) Retired Consultant Nephrologist, Dublin.

The COVISION Project is a global community focused project to help children and their communities around the world adjust to

2021 UCD School of Medicine graduates with Professor Michael Keane, Dean UCD School of Medicine: (l-r) Dr Madison Phipps, Dr Ross Walshe, Prof Michael Keane, Dr Jamie Walsh, Dr Kirsten Carpenter, Dr Matthews Gibbons and Dr Sarah Cooney.
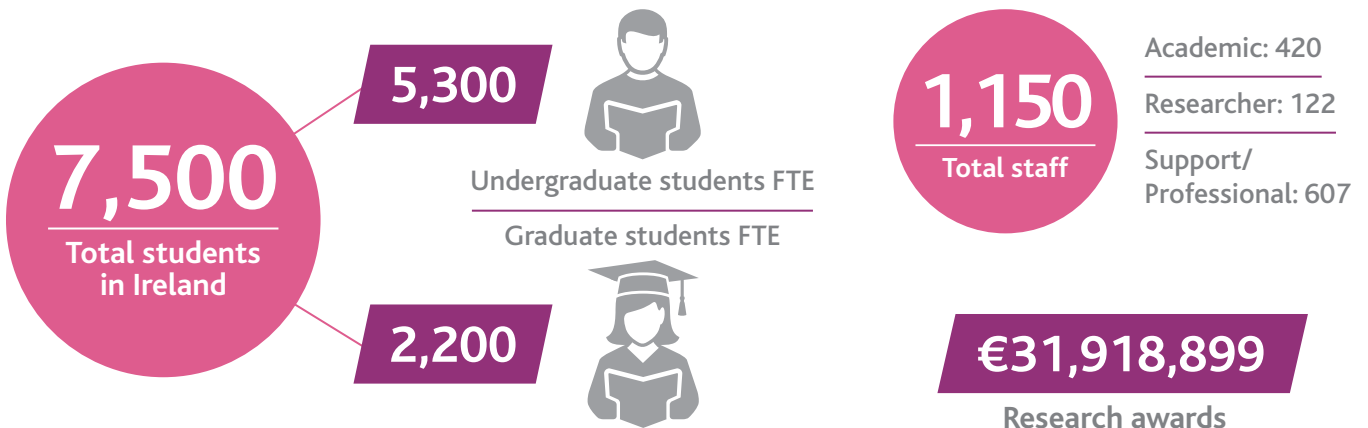
Pictured at the launch of Farm Walk and Talk series at UCD Lyons Farm in conjunction with Agri Aware are Wesley College students Sophie Doyle Smyth, Christopher Bailey, Rachel Patterson, Avalily l'Estrange, Ethan O'Connor and Sophie O'Connor with Katriona Kinsella of the Irish Farmers Journal, Teagasc chairman Liam Herlihy, Agri Aware chairman Alan Jagoe, Agri Aware Executive Director Marcus O'Halloran and UCD School of Agriculture and Food Science's Dr Bridget Lynch.

the challenges of the COVID-19 pandemic and beyond. Led by Dr Suja Somanadhan, UCD School of Nursing, Midwifery and Health Systems and funded by the Health Research Board and the Irish Research Council, the project explores the creative and innovative ways in which children have been responding to changes during the pandemic and how their initiatives may help other children.

Healthy UCD continues to promote the health and well-being of the UCD community. MSc Dietetics students delivered a virtual Healthy Eating week for faculty, staff and students. BSc Sport and Exercise Management students delivered a virtual 'Wellness Your Way' event.

UCD Health Affairs and the Ireland East Hospital Group launched their first Virtual Grand Round, hosted by The Pillar Centre for Transformative Healthcare at the Mater Hospital in March. The Grand Round was well attended with over 200 attendees from a broad range of hospital groups and universities throughout the country.

Professor Cecily Kelleher
College Principal

7,500
Total students in Ireland

5,300
Undergraduate students FTE

2,200
Graduate students FTE

1,150
Total staff

Academic: 420

Researcher: 122

Support/ Professional: 607

€31,918,899
Research awards

COLLEGE OF SCIENCE

Professor Joe Carthy
College Principal and
Dean of Science

August 2021 marks the end of my 10-year tenure as Principal of the UCD College of Science. I now hand over to Professor Jeremy Simpson, and I wish him every success and am confident that the College is in excellent hands for a bright future!

I want to take this opportunity to thank everyone in the College (including retired colleagues) not only for the support I have received during my tenure but for their remarkable dedication and commitment which has been amply demonstrated over the past year. In particular, I want to thank the Science Office team, so ably led by Annette Forde, who do so much unseen work, managing our programmes and looking after students, faculty and staff.

Teaching and Learning
The 2020/21 academic year was very challenging. The faculty's impressive response, which involved a steep learning curve to develop, deliver and assess material online, was laudable with great support from Cesar Scrochi, the College's educational

technologist. Furthermore, successful efforts to redesign laboratory components to make the spaces and experiments Covid-safe were a credit to the technical officers, laboratory managers and postgraduate demonstrators involved. Work to move some laboratory sessions online or at-distance was also undertaken and these combined with in-person laboratory offerings were enthusiastically valued by students.

The College presented 15 Teaching and Learning Awards to: Associate Professor Miguel Bustamante, Dr Anthony Cronin, Professor Claire Gormley, Associate Professor Pauline Mellon, Dr Adamaria Perrotta, Dr Michael Salter-Townshend, Dr Joanna Kacprzyk, Dr Tony Keene, Dr Gavin McArdle, Associate Professor Pavel Gladyshev,

Dr Derek Costello, Professor Keith Murphy, Dr Craig Slattery, Dr Sharon Shannon and Associate Professor Brian Vohnsen. Dr Anthony Cronin was also awarded a University-level Teaching and Learning prize.

Student Recruitment

Science (DN200), Computer Science (DN201) and Actuarial and Financial Studies (DN230) continued to attract an excellent and diverse cohort of students in September 2020. The increased preferences across all courses in July 2021 reflect the continuing interest by students in studying STEM degrees. The Science (DN200) common entry course, once again, attracted the largest number of first preferences at UCD in July 2021. The new interdisciplinary course in Sustainability had a 75% increase in first preferences compared to last year.

The introduction of internships and professional placements has given our students unique opportunities to apply their knowledge from the classroom in a business or research setting. Our two internships managers are currently working with over 450 employers and placed a total of 265 undergraduate and graduate taught students for the academic year 2020/21.

Widening Participation

The College continues to work closely with UCD Access and Lifelong Learning to widen participation across all the College's undergraduate degrees. Recent data shows 37% of Computer Science students, 35% of Science students and 12% of BAFS students enter UCD through a Widening Participation route. A new Cothram na Féinne scholarship scheme supported widening participation within our Graduate programmes and eight MSc graduate fee waiver scholarships were offered.

UCD Explore

This year the UCD Explore schools programmes transitioned to an online platform. We created an array of resources including lesson plans, videos and podcasts to support STEM exploration in the classroom and at home. We look forward to continuing our virtual activities and resuming our face-to-face primary schools programmes this coming trimester.

Global Engagement

Global engagement in the College was led by Professor Jeremy Simpson and Professor Eleni Mangina. The ongoing COVID-19 situation and associated travel restrictions resulted in a dramatic curtailment of the usual in-country activities. Nevertheless, the College seized on the opportunity to interact with a wider cohort of partners and students around the globe using a variety of online platforms. The College actively participated in a number of virtual recruitment fairs in China, India and North America, as well as delivering online lectures to high schools in a number of countries. We also took the opportunity to interact with key partners at the UCD Partnerships Forum in April, which provided an excellent opportunity to develop new ideas for the year ahead. Specific highlights of the year included the UCD-BJUT symposium, as well as running the College's first fully online ICT summer school, entitled 'Empowering tomorrow's leaders with programming skills', for a group of highly energetic students at Delhi Public School, New Delhi, India. The success of this led to the College developing a similar summer school in the area of sustainability, again a topic

265

undergraduate and graduate taught student internships and professional placements in place for the academic year 2020/21

// Recent data shows 37% of Computer Science students, 35% of Science students and 12% of BAFS students enter UCD through a Widening Participation route **//**

of growing interest and importance globally. It is expected that these events will run on an annual basis in the future.

Research and Impact

This has been a very successful year in terms of winning consortium-based research project funding. Significant award highlights include:

- UCD School of Earth Sciences: The iCRAG SFI Research Centre for Applied Geosciences led by Professor Murray Hitzman, UCD School of Earth Sciences, will receive €28 million from SFI over the next six years to create 130+ research and support positions across eight Irish HEIs.
- UCD School of Biology and Environmental Science: €1.2 million from European Regional Development Fund to Professor Fiona Doohan for project entitled Healthy Oats.
- UCD School of Biomolecular and Biomedical Science: €2 million from SFI to Professor William Gallagher for a project entitled National Preclinical Imaging Centre. €1.3 million from SFI to Professor Geraldine Butler for a project entitled Effect of Genome Diversity on Antifungal Drug Resistance in the Human Pathogen Candida parapsilosis. €1.5 million from SFI (SFI Future Innovator Prize 2021) to Professor Kevin O'Connor for a project entitled Farm Zero C: Creating a Carbon-neutral Resilient Dairy Farm – Phase 2. €1.2 million from HORIZON 2020 to Professor Kevin O'Connor for a project entitled Developing Talent for Bio-Based Industries of Europe.
- UCD School of Computer Science: €1 million from Enterprise Ireland to Dr David John Lillis for a project entitled Trained AI Platform for Regulation.
- UCD School of Physics: €1.1 million from SFI to Associate Professor Emma Sokell for a project entitled Nanoimaging and Spectroscopy Enabling Brilliant Tuneable Laboratory-scale X-ray Source Technology.

In addition, the College research partnerships achieved significant success in the Disruptive Technologies Innovation Fund. The successfully funded projects are:

- CAMEO (€6.4 million) through the UCD Centre for Space Research. This consortium is led by Professor Gregory O'Hare, UCD School of Computer Science.
- E-Crop (€1.5 million) to work on innovative agri-technologies.

College structure

**Associate Professor
Tara McMorrow**
Associate Dean of Science

**Associate Professor
James Sullivan**
Vice-Principal for Teaching
and Learning

Dr Antoinette Perry
Vice-Principal for Equality,
Diversity and Inclusion

Professor Jeremy Simpson
Vice-Principal International

Professor Eleni Mangina
Deputy Vice-Principal
International

Professor Gareth Redmond
Vice-Principal for Research
and Innovation

Associate Professor Carl Ng
Associate Dean for Study Abroad

**Associate Professor
Siobhán McClean**
Associate Dean for Widening
Participation

**Associate Professor
Paul McCabe**
Vice-Principal for Graduate
Studies

**The College of Science consists
of seven schools:**

**Associate Professor
Evelyn Doyle**
Head of School, UCD School
of Biology and Environmental
Science

Professor Wim Meijer
Head of School, UCD School
of Biomolecular and Biomedical
Science

Selected speakers from UCD Discovery's Zoom for Thought series.

This consortium is led by Professor Fiona Doohan, UCD School of Biology and Environmental Science.
- iPATH-CAN (€3 million) to develop an AI tool to identify breast and prostate cancer patients with early-stage disease. This consortium is led by Professor William Gallagher, UCD School of Biomolecular and Biomedical Science.
- CHANNEL (€1.9 million) to create a software platform to predict human sensory quality attributes of food products for taste and health benefits. This consortium includes Dr Ricardo Simon Carbajo, UCD School of Computer Science.

A number of faculty received awards in their fields of expertise:
- The UCD Institute for Discovery, led by Professor Patricia Maguire, UCD School of Biomolecular and Biomedical Science, was awarded full membership of the prestigious 'University Based Institutes of Advanced Study' (UBIAS), an international network that promotes an excellent, innovative and international interdisciplinary academic research culture.
- Professor Kenneth Dawson, UCD School of Chemistry, was named among the world's most influential researchers (top 1% of the most cited researchers in their field in the world) in the latest Highly Cited Researchers report.
- Professor Geraldine Butler, UCD School of Biomolecular and Biomedical Science, was elected as a Fellow of the American Society for Microbiology based on her scientific achievements and original contributions that have advanced microbiology.
- Professor Declan Gilheany, UCD School

of Chemistry, was the 2020 winner of the Institute of Chemistry of Ireland's Annual Award, one of Ireland's top accolades for those working in the field.

Innovation
- Cerebro R&D Ltd, a new UCD spin-out company founded by Professor Keith Murphy and Associate Professor John Crean, UCD School of Biomolecular and Biomedical Science and Dr James Linden, has been established to develop personalised medicine approaches for mental health based on proprietary brain organoid models.
- TOAD R&D Ltd (t/a Alvarius Pharma Ltd), a new UCD spin-out company founded by Professor Keith Murphy, UCD School of Biomolecular and Biomedical Science, Professor David Nutt and Dr James Linden, was established to develop the use of psychedelic substances in the treatment of mental disorders.
- Dr Donal MacKernan, UCD School of Physics, has developed a disruptive molecular switch platform technology and licensed it to Fionnachtain Inc, a US-registered company recognised as a UCD spin-out, with an initial application as a point-of-care medical diagnostic for COVID-19 and influenza.

Professor Joe Carthy
College Principal and Dean of Science

College structure

Associate Professor Michael Casey
Head of School, UCD School of Chemistry

Associate Professor Chris Bleakley
Head of School, UCD School of Computer Science

Associate Professor Patrick Orr
Head of School, UCD School of Earth Sciences

Associate Professor Edward Cox
Head of School, UCD School of Mathematics and Statistics

Professor Martin Grunewald
Head of School, UCD School of Physics

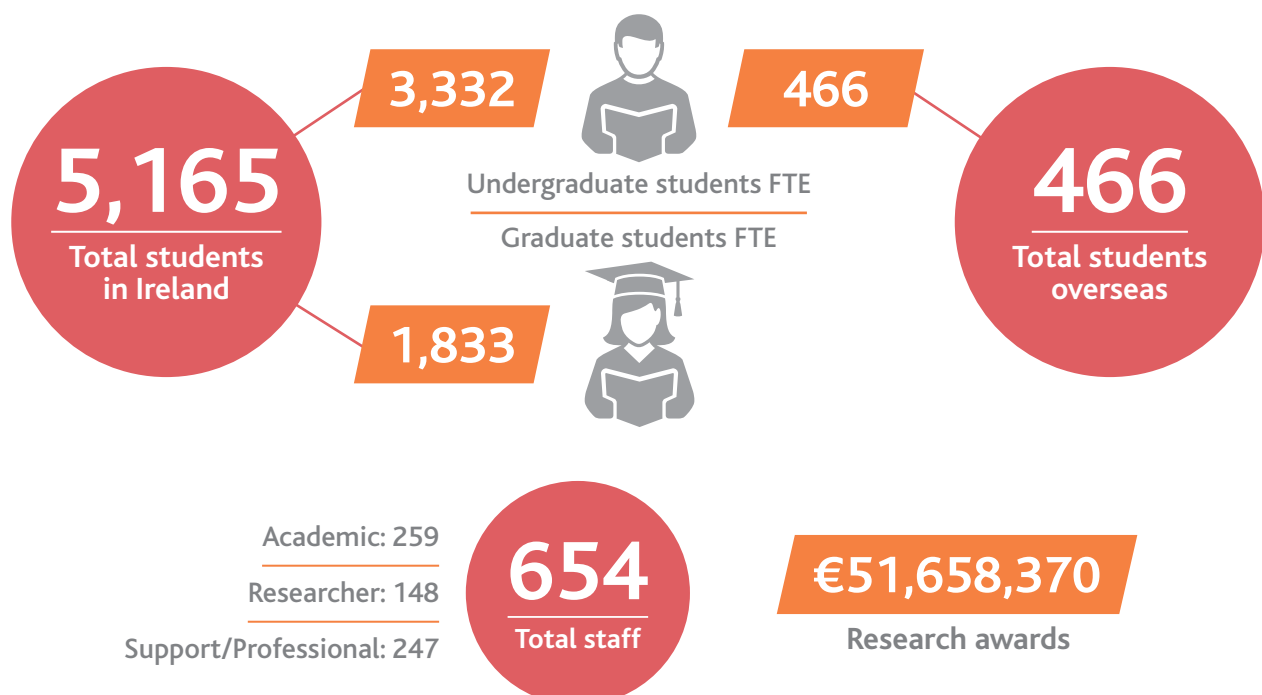As at 1 September 2020

Message from New Principal

It is an absolute privilege and honour to take on the role of College Principal and Dean of Science. The UCD College of Science has been eminently led for the last ten years by Professor Joe Carthy, and it is fitting to acknowledge his outstanding leadership during this time. The College has seen exceptional change, most notably with the development of the O'Brien Centre for Science, an iconic building on the Belfield campus that has transformed our educational and research capabilities. Professor Carthy has also led the College through the disruption that COVID-19 has brought. Despite this particular challenge, he has overseen innovation in the delivery of our programmes and ensured that essential research activities have continued.

The next period of time for the College is an exciting one, not least because we are now at an advanced planning phase for further development of our physical infrastructure. While there will be short-term disruption, the replacement of our oldest buildings in the Science Centre will ensure that the College is suitably placed for the challenges that lie ahead. The pandemic has served to emphasise the importance that science and its disciplines play in wider society, and the unique constellation of constituent Schools, Institutes and Centres within the College should guarantee that we can rise to such challenges.

At the heart of the College are our faculty, staff and students, and it will be essential that they are afforded every opportunity for further development and the resources to fulfil their potential. As we begin this next chapter in our story, we want to ensure that inclusivity is at the heart of everything that we do, and that the UCD College of Science further grows its global presence and reputation. I greatly look forward to guiding the College through this next phase of discovery.

Professor Jeremy C Simpson
College Principal / Dean of Science

5,165
Total students in Ireland

3,332
Undergraduate students FTE

1,833
Graduate students FTE

466

466
Total students overseas

Academic: 259
Researcher: 148
Support/Professional: 247

654
Total staff

€51,658,370
Research awards

Pictured at the launch of the National Online Training Programme for Special Needs Assistants (SNAs) are (l-r): Joe Hayes, Chairperson, National Council for Special Education, Minister of State for Special Education and Inclusion Josepha Madigan TD and Prof Colin Scott, College of Social Sciences and Law.

COLLEGE OF SOCIAL SCIENCES AND LAW

Professor Colin Scott
College Principal and
Dean of Social Sciences

€2.7m

contract secured from the Department of Education to establish a national online training programme for Special Needs Assistants (SNAs) working in Irish schools

Faculty and staff in the College rose magnificently to the challenges posed by COVID-19 over the past year, taking opportunities to further enhance interdisciplinary teaching and research.

These achievements build on the standing of social sciences and cognate disciplines at UCD, offering the knowledge and skills with which to better understand and address major societal challenges. The College received recognition in the 2021 QS World Rankings with Library and Information Management ranked in the top 50 in the world and the following subjects ranked in the top 100 – Law, Politics and International Studies, Philosophy and Archaeology and all schools in the College represented in the global top 250. Additionally, UCD Sutherland School of Law was ranked 84th in the world for law by Times Higher Education Ranking 2021.

Education and Student Experience

The College welcomed over 1,000 new undergraduate students into Social Sciences and Law degrees and over 1,000 students into graduate taught masters, research masters, postgraduate and higher diploma programmes. Significantly, this was the first year that students in the four-year Social Sciences programme could participate in an academic internship placement or avail of study abroad opportunities. We are indebted to the many employers in business, government and not-for-profit sectors who hosted the 50 students who successfully completed internships.

UCD School of Education secured a contract to the value of €2.7 million from the Department of Education to establish a

national online training programme for Special Needs Assistants (SNAs) working in Irish schools. This is a landmark programme which will provide for first-time training on a national scale for 3,500 SNAs over the next three years and last year over 1,000 students participated in the training course. A number of schools in the College responded successfully to a call from Government to bring in more than 100 additional students for January starts across a wide range of graduate programmes.

UCD Sutherland School of Law launched a new online professional diploma in Dispute Resolution (Mediation) to contribute to the rapidly developing skills-based economy. Led by Associate Professor Brian Hutchinson, in partnership with higher education start-up Mediator Academy, the online format allows for the inclusion of contributions from many domestic and international experts.

Teaching and Learning

In compliance with public health requirements our Schools pivoted to online learning, supporting students to continue their learning journeys very effectively. Vice-Principal for Teaching and Learning, Associate Professor Niamh Moore-Cherry developed a teaching, learning and assessment protocol to support and guide colleagues. A third College T&L publication was produced this year: *Shaping the future of Social Sciences Education: Innovation, partnership and enhancement,* showcasing 13 case studies of educational excellence supported under National Forum Learning Enhancement Project funding, College Curriculum Development Awards and College Students as Partners awards.

Dr Sarah Fulham-McQuillan, UCD Sutherland School of Law and Dr Deirdre McGillicuddy, UCD School of Education received University Teaching and Learning Awards which celebrate the achievements of colleagues who make an outstanding contribution in the pursuit of teaching excellence and the enhancement of student learning. 11 College level awards were made under Teaching Excellence and

UCD Sutherland School of Law BCL graduate, Grace Oladipo was awarded a Fulbright Scholarship to study at the University of Notre Dame, Indiana.

// The College's research publications output continued at an impressive rate, with a 32% increase in SciVal recorded outputs in 2020/21 //

2 awards under Outstanding Contribution to Student learning. Professor Ian O'Donnell, UCD Sutherland School of Law was awarded the Dean of Graduate Studies Award for Excellence in Doctoral Supervision which recognises excellence in research supervisory practice by a UCD academic faculty member.

Research and Impact

Funding awards included five new Horizon 2020 projects, four of which were funded under 'Research Infrastructures' Programmes and the fifth and largest was a Marie Sklodowska-Curie Global Fellowship awarded to Associate Professor Nuala Brady, UCD School of Psychology for her project entitled 'Body Imagery and Posture Effects in Development and Learning (BIPEDAL)'. A record 47 new IRC Awards (valued at €2.69 million) were won in 2020/21. Funding from other bodies included six College projects funded under the SFI COVID-19 Rapid Response Research and Innovation Funding Call.

The College's research publications output continued at an impressive rate, with a 32% increase in SciVal recorded outputs in 2020/21. This reflects an increased focus on the quality and impact of publication outputs. The College's Field Weighted Citation Impact averaged 1.42 for the period 2015-2019 and is on an upward trajectory since 2011.

Creating a Sustainable Global Society: College Principal, Professor Colin Scott chaired the project steering group that published the University' first Sustainability Report outlining a structured programme designed to embed the United Nations Sustainable Development Goals (UN SDGs) across the University's education, research, governance and engagement activities. A number of schools are contributing to the very successful new interdisciplinary undergraduate BSc Sustainability degree, which has pathways in Social Sciences, Policy and Law and in Business and Economics. UCD School of Politics and International Relations is leading on a new interdisciplinary online MSc in Sustainable Development which has proved very popular in its first year.

Transforming through Digital Technology: Minister for Further and Higher Education, Research, Innovation and Science Simon Harris TD joined UCD and Microsoft to launch Ireland's first Digital Policy Programme. The programme was established through a collaboration between Microsoft and UCD to achieve an ambition of building digital policy capability amongst the public and private sector in Ireland and across the wider European Union through graduate education, research and engagement.

UCD School of Politics and International Relations launched the UCD Connected Politics Lab, an interdisciplinary hub for researchers using computational methods to study politics and society.

Building a Healthy World: Through the COVID-19 pandemic the College has supported wide-ranging interdisciplinary research across

College structure

Dr Aideen Quilty
Associate Dean Undergraduate
Social Sciences

Dr Nuala Brady
Associate Dean Graduate
Social Sciences

Dr Graham Finlay
Vice-Principal for Widening
Participation

Professor Aisling Reynolds-Feighan
Vice-Principal for Research,
Innovation and Impact

Dr Niamh Moore-Cherry
Vice-Principal for Teaching
and Learning

Professor Ben Tonra
Vice-Principal for Global
Engagement

Professor Judith Harford
Vice-Principal for Equality,
Diversity and Inclusion

**UCD College of Social Sciences
and Law consists of 11 Schools:**

Professor Joanna Bruck
Head of School, UCD School
of Archaeology

Professor Ronald Davies
Head of School, UCD School
of Economics

**Associate Professor
William Kinsella**
Head of School, UCD School
of Education

Professor Jacky Croke
Head of School, UCD School
of Geography

Professor Eugenia Siapera
Head of School, UCD School of
Information and Communication
Studies

health and health policy. In addition, the College has supported key research centres and groups including Childhood and Human Development and Disability Studies and in the UCD Geary Institute for Public Policy.

Empowering Humanity: Our academic community continues to be recognised in their fields of expertise. These include Professor David Farrell, UCD School of Politics and International Relations who was elected as the chair of the European Consortium for Political Research. He is the first Irish person to be elected to this role and assumed the three-year term in May 2021. Karen Anderson, Associate Professor of Social Policy, was appointed Chair of the Council for European Studies, the leading scholarly organisation devoted to interdisciplinary research on European politics and society. Professor of Gender Studies, Aisling Swaine, UCD School of Social Policy, Social Work and Social Justice was named as one of Apolitical's 100 Most Influential People in Gender Policy list in 2021 under the category Gender-Based Violence. Aisling's research and teaching focuses on conflict-related violence against women, transitional justice and global gender policy, with a focus on gender-based violence and on the women, peace and security agenda. Professor Brian O'Connor, Head of UCD School of Philosophy was elected to the Royal Irish Academy in May

2021, the highest academic honour in Ireland. He has gained international renown for his distinctive contributions in critical social theory and the history of German philosophy. Professor Oonagh Breen of UCD Sutherland School of Law was appointed chair of the Independent Review of Charity Regulation in Northern Ireland and also joined the Board of the Approved Housing Bodies Regulatory Authority.

Equality, Diversity and Inclusion

The College has continued to build on its success in recruiting and supporting students through routes designed to widen participation. In particular, the College has been more proactive in admitting criteria for mature students which has led to an increased number enrolling in our programmes, bucking a national trend. All cohorts of widening participation students are well-represented: 57.8% of Sociology and Social Policy students, 46.3% of Law students and 38% of BSc Social Sciences belong to at least one cohort. Of the 443 Cothrom na Féinne scholarship recipients at all levels in the University, the College has 117. The College also has 26 out of 45 of the University of Sanctuary students in the University, 9 of whom are enrolled in BSocSc in Social Policy and Sociology.

An International Women's Day Webinar was hosted by Professor Judith Harford, Vice-
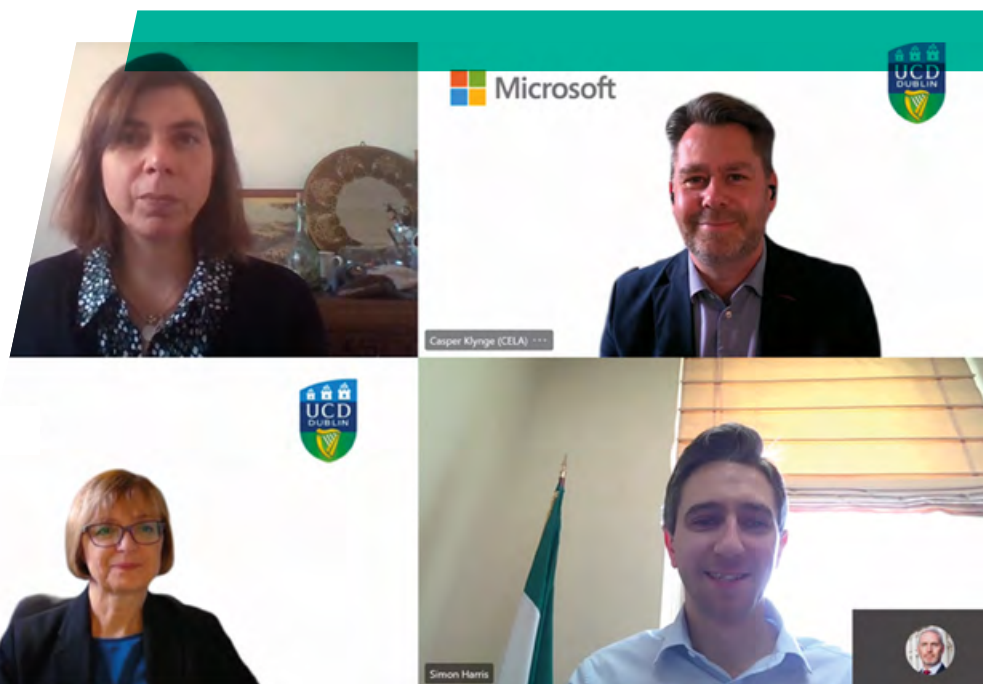
Pictured at the launch of Ireland's First Digital Policy Programme: Prof Eugenia Siapera, Head of UCD School of Information and Communication Studies; Caspar Klynge, VP for European Government Affairs, Microsoft Brussels; Cathriona Hallahan, MD Microsoft Ireland; and Simon Harris TD, Minister for Further and Higher Education, Research, Innovation and Science.

College structure

Professor Imelda Maher
Head of School and Dean of Law,
UCD Sutherland School of Law

Professor Brian O'Connor
Head of School, UCD School
of Philosophy

Professor David Farrell
Head of School, UCD School
of Politics and International
Relations

Professor Suzanne Guerin
Head of School, UCD School
of Psychology

Professor Jim Campbell
Head of School, UCD School
of Social Policy, Social Work
and Social Justice

Dr Iarfhlaith Watson
Head of School, UCD School
of Sociology

As at 1 September 2020

Principal for Equality, Diversity and Inclusion and featured Professor Aisling Swaine, UCD School of Social Policy, Social Work and Social Justice; Dr Emma Penney, UCD Access student and postdoctoral fellow in UCC, whose research focuses on working-class women's community writing; and Dyuti Chakravarty, doctoral student in UCD School of Sociology whose research examines women's movements for bodily autonomy in India and Ireland.

Community and Engagement

College Vice-Principal for Global Engagement, Professor Ben Tonra commenced a new webinar series focusing on the responsibilities and obligations of global universities like UCD in their global engagement. The first of these in April 2021 looked at how UCD might better defend the human rights and academic freedoms of faculty, staff and students on home and overseas campuses. The event featured international speakers Professor Eva Pils, Kings College London; Dr Sophia Richardson, Human Rights Watch; Dr Catherine Owen, University of Exeter; Professor Dominic Sachsenmaier, University of Göttingen; and Professor Alexander Cooley Columbia University.

UCD Sutherland School of Law and Nasc, the Migrant and Refugee Rights Centre co-hosted a series of online webinars from November 2020 to March 2021 analysing the potential

of proposals to end the system of direct provision. Amongst the contributors to the seminar series was activist, Owodunni Ola Mustapha, who is living in direct provision. There were also speakers representing civil society organisations who have campaigned against the system of direct provision, government and opposition politicians, and academics from UCD.

UCD Centre for Constitutional Studies held a series of five Public Law Seminars on a variety of topics. Organised by Professor Eoin Carolan, UCD Sutherland School of Law, guest speakers included leading barristers and solicitors and academic experts in the field.
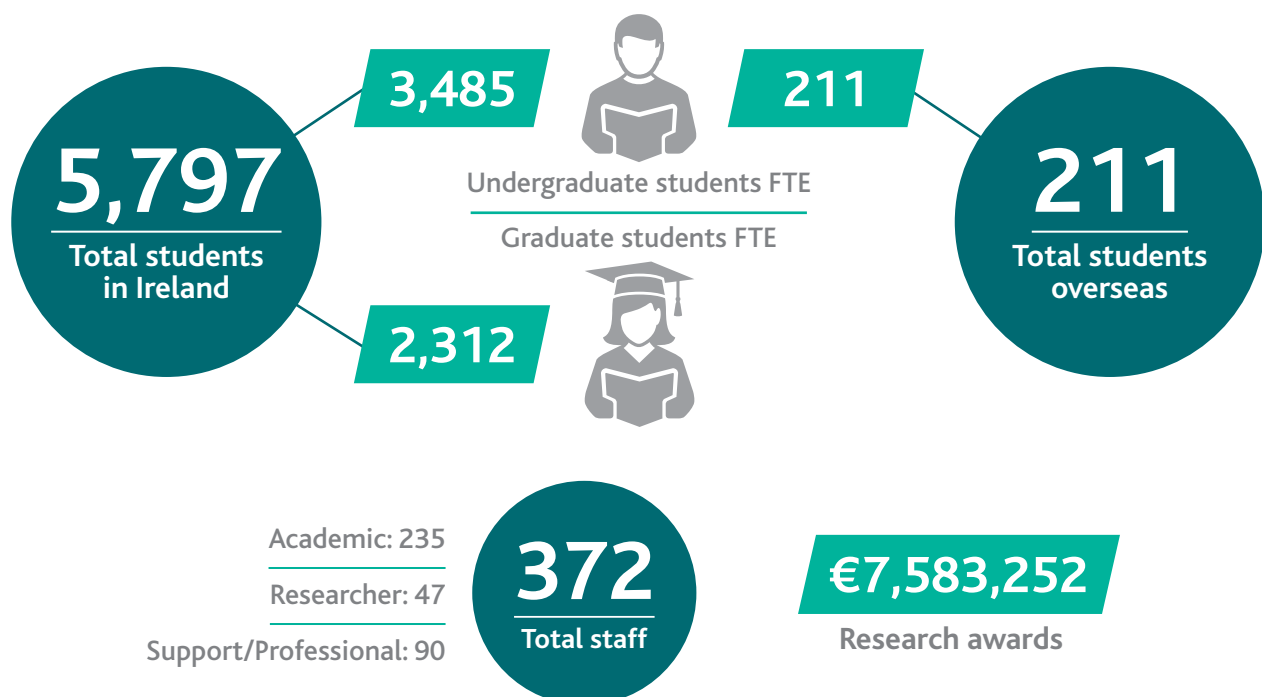
UCD School of Philosophy organised the fourth Irish Young Philosopher Awards with the introduction of the International Award category attracting over 200 individual and group projects.

Representatives from UCD School of Education and UCD School of Economics were involved again this year with the Young Economist of the Year Awards which attracts applications from secondary school students.

Professor Colin Scott
College Principal and Dean of Social Sciences

5,797
Total students
in Ireland

3,485
Undergraduate students FTE

Graduate students FTE
2,312

211

211
Total students
overseas

Academic: 235
Researcher: 47
Support/Professional: 90

372
Total staff

€7,583,252
Research awards

UNIVERSITY AWARDS

UCD Alumni Awards 2020

The annual UCD Alumni Awards, proudly celebrate the success and exceptional achievements of UCD's alumni and recognise their outstanding accomplishments and contribution to society.

Dalton Philips BA 1990

2020 UCD Alumni Award in Arts and Humanities

Dalton is chief executive of the semi-state Dublin Airport Authority. His retailing career began as a store manager in New Zealand and he went on to become chief executive of Morrisons, the fourth largest supermarket chain in the UK. He has also served as chief executive of Brown Thomas.

Mark Pollock MBS 2003
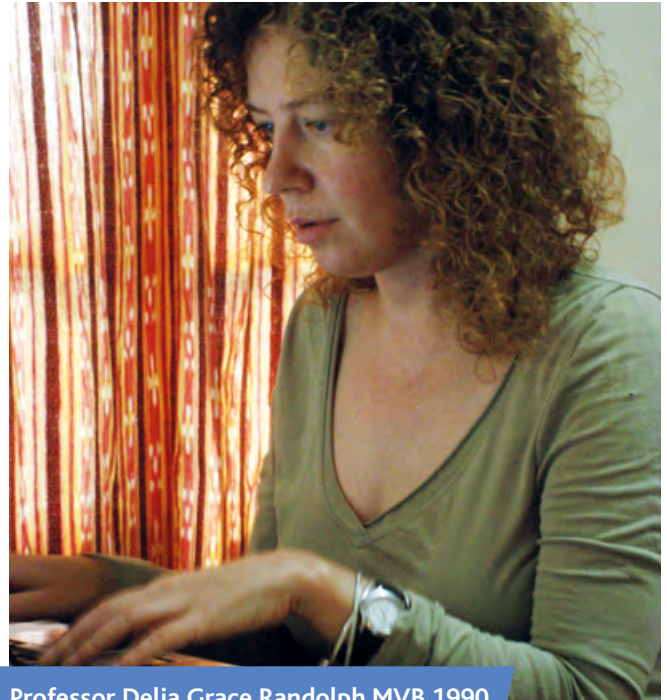
2020 UCD Alumni Award in Business

Mark is an explorer, author and motivational speaker who became the first blind man to race to the South Pole. He lost his sight in his early 20s. He suffered paralysis after a fall in 2010 and has had to rebuild his life again. Now, he is working to help cure paralysis. He is the founder of the global race, Run in the Dark, which pivoted to a virtual event in 2020.

Róisín Heneghan BArch 1987

2020 UCD Alumni Award in Engineering and Architecture
Róisín is an Irish architect and designer and co-founder of Heneghan
Peng Architects. She was shortlisted for Architects' Journal Woman
Architect of the Year in 2014. She has won numerous awards and
her work includes the Grand Museum of Egypt and the Giants
Causeway Visitor Centre.

Professor Delia Grace Randolph MVB 1990

2020 UCD Alumni Award in Health and Agricultural Sciences
Delia is Professor of Food Safety at the University of Greenwich.
A veterinarian by training, she has worked for the World Animal
Health Organisation, the World Health Organisation, the Food and
Agriculture Organisation and the World Bank. She divides her time
between the UK and Kenya.

Sally Hayden BCL 2012

2020 UCD Alumni Award in Law
Sally is an award-winning journalist and photographer currently
focused on migration, conflict and humanitarian crises. Her work
has been published in the New York Times, the Guardian, Time
and CNN. She has previously lectured at London College of
Communication and New York University and has mentored
at the Refugee Journalism Project.

Cormac Kilty BSc 1975, PhD 1985

2020 UCD Alumni Award in Science
Cormac is a biotech entrepreneur, manages a biotech investment
portfolio and is involved with two angel investment groups in
Ireland. He was the founder of Biotrin, a virology diagnostics
company, and Argutus Medical, and is currently Adjunct Associate
Professor of Medicine and Medicinal Chemistry at UCD.

Sharon Donnery BA 1993, MA 1994

2020 UCD Alumni Award in Social Sciences
Sharon is the Deputy Governor of the Central Bank of Ireland with responsibility for leading its financial stability, economics and statistics and financial operations directorates. She joined the Central Bank in 1996 as an economist in the monetary policy division and was acting Governor in 2019.

Sandra Collins BSc 1991, PhD 1996

2020 UCD Alumni Award in Research, Innovation and Impact
Sandra is Director of the National Library of Ireland. She has worked as Director of the Digital Repository of Ireland at the Royal Irish Academy and has developed the infrastructure for the digital preservation of cultural and social data. She was named by Silicon Republic as one of the top women in technology.

Jack McCaffrey MB BCh, BAO 2018

2020 UCD Alumni Award in Sport
Jack has been a key part of Dublin's all-conquering Gaelic football side. At 26, he already has five All-Ireland titles to his name and he was on the team that won an unprecedented five titles. He plays his club football with Clontarf and is a doctor specialising in paediatric medicine.

APPOINTMENTS AND PROMOTIONS

Appointments

Full Professor
Professor Andrew Davies
School of Medicine

Professor Niamh Nowlan
School of Mechanical and Materials Engineering

Professor Siobhan Mullan
School of Veterinary Medicine

Professor Nasrine Seraji
School of Architecture, Planning and Environmental Policy

Professor Fiona Timmins
School of Nursing, Midwifery and Health Systems

Professor Dimitrios Zevgolis
School of Mechanical and Materials Engineering

Professor
Professor Eleni Theodoraki
School of Public Health, Physiotherapy and Sports Science

Promotions

Full Professor
Professor Gerardine Doyle
School of Business

Professor Padraig Dunne
School of Physics

Professor Stephen Gordon
School of Veterinary Medicine

Professor Claire Gormley
School of Mathematics and Statistics

Professor Donna Marshall
School of Business

Professor Rowland Stout
School of Philosophy

Professor
Professor Fionnuala Dillane
School of English, Drama and Film

Professor Trudee Fair
School of Agriculture and Food Science

Professor Donal Finn
School of Mechanical and Materials Engineering

Professor Eileen Gibney
School of Agriculture and Food Science

Professor Claire Gormley
School of Mathematics and Statistics

Professor Jane Grogan
School of English, Drama and Film

Professor Thomas Grund
School of Sociology

Professor Alison Hanlon
School of Veterinary Medicine

Professor Eamonn Jordan
School of English, Drama and Film

Professor Steven Loyal
School of Sociology

Professor Bryan Markey
School of Veterinary Medicine

Professor Colm McLaughlin
School of Business

Professor Lisa Ryan
School of Economics

Professor Michael Staunton
School of History

Professor Dominic Zerulla
School of Physics

RETIREMENTS

UCD Academic Affairs

UCD Library

Marie Burke

Marie, throughout her 34-year career, was involved in the continuous process of change that transformed UCD Library services. Her leadership style reflected respect, open communication and unity of purpose, always placing the needs of library users at the centre, while being committed to supporting and developing library staff. Marie began her career as Assistant Librarian in Bibliographic Records (September 1986) and moved to the Architecture and Planning Library, Richview (October 1989 – April 1993). She progressed to the role of Associate Librarian in February 2000; served as Acting Deputy Librarian from March 2008; and was appointed Joint Library Director in January – October 2009.

Marie guided many areas of library work – including intellectual property, GDPR, financial and staff planning, organisational restructuring and adoption of new technologies. She saw the advent of Library automation and helped to realise the opportunity provided by the Irish Virtual Research Library and Archives (IVRLA), which set UCD on a path to sharing its heritage resources with the rest of the world. Marie, in her work with UCD HR, was guided by a sense of fairness and a deep knowledge of the library's functions – knowledge she brought to the UCD Job Families project.

During the pandemic, Marie represented the Library on the Reopening Campus Facilities and Services Working Group and played a leading role, with colleagues, in ensuring UCD libraries were safe for users and staff alike. Marie was very highly regarded and trusted by her library colleagues and her many friends and associates across UCD.

Gisela Byrne

Gisela joined the staff in 2002 as Duty Librarian with responsibility for evening and Saturday service. She saw students not as a collective body but as individuals, and she led the 'twilight' team to deliver service with kindness, encouragement and patience. The early noughties witnessed the shift from the use of print to e-resources, which changed how students used the library services and resources. During this transition, Gisela's earlier teaching experience came to the fore, as each desk transaction became a teaching moment. Gisela was an unfailing advocate for students. She also believed that every problem had a solution, and her pragmatism and common sense was constant and valued. Many early career librarians are indebted to Gisela for her mentoring during their period as MLIS students, working at the James Joyce Library desk, as she helped bridge the gap between the academic and applied. Gisela retired in March 2021.

Marion Drew

Having joined the part-time evening and weekend service team in the James Joyce Library in 2007, Marion later transferred to the Veterinary Medicine and Blackrock libraries. She always had the students' interests at heart, and over the years helped many in many ways, and without fanfare. Her beautifully crafted Christmas display in the Veterinary Library became an integral part of the Christmas season on campus. Marion, who retired in September 2020, will be remembered by many students for her kindness.

Anne Foley

Anne, who joined the Library Floor Services staff in 1997, played a key role in ensuring that library books and journals were correctly shelved and easily findable. She was meticulous in her work, recognising the importance of a quick turnaround of recently returned materials. Her institutional knowledge of the library collections was impressive, as was her ability to undertake stock moves. Her ability to find mis-shelved, lost and hidden material was well honed, and she took great pride in finding high use material lost in 'plain sight', filed incorrectly and surprisingly sometimes on the wrong floor and restoring it to its rightful place, much to the assumed chagrin of the student who had adopted this strategy! Anne retired in May 2021.

Stewart McKee

Stewart joined UCD in January 1983 as an Assistant Librarian in the James Joyce Library, then known as the Main Library. He transferred to the Earlsfort Terrace Library in 1986, supporting the Schools of Medicine and Engineering. When the Terrace closed in 2007, Stewart moved to the UCD campus, and joined the Collections Team in the James Joyce Library.

During his time at UCD, Stewart supported the transformation of library services from the print world of card catalogues and printed journals to online digital resources. He taught cataloguing to students in the UCD Library School and built up an impressive network of colleagues throughout the institution. In more recent years he led a very successful project to curate and refresh the Vet Library collection – removing outdated materials, adding new print and digital resources, and improving the facilities for students. While Stewart retired in June 2021, he is still an active member and officer of the UCD Golf Society. He is greatly missed by his friends and colleagues.

Deirdre Ohle

Deirdre joined the Facilities Team in the James Joyce Library in 2006, transferring to the Client Services team in the Health Science and Veterinary libraries in 2016. Excellent customer service was the hallmark of Deirdre's career within UCD, and she was very attuned to equality, diversity, and inclusion, treating everybody she met with empathy and understanding. Deirdre, a popular member of staff, retired in November 2020.

Student Services

Stephen Hingerty

Stephen joined UCD Grounds Department in 1982 as a Superintendent of Sports Surfaces. As his appointment coincided with the opening of the UCD Sports Centre, the role required a merging of the traditional management of outdoor grass pitches with the newly installed indoor surfaces. Stephen managed to centralise and lead on continuous improvements of the standard of pitch surfaces throughout the campus and was at the forefront of new developments and infrastructure as the use of synthetic surfaces and floodlighting expanded and became the norm. Stephen developed strong relationships with his UCD work colleagues and service providers, all of whom wish him the best in his retirement.

Dr Sandra Tighe

Sandra retired from her post as Medical Director of UCD Student Health in December 2020. Over the past 23 years, she served as a source of compassion, care and support for students. Her long and illustrious career has seen the Student Health and Counselling Service significantly expand under her leadership, placing the service as a benchmark model within an Irish university setting.

Beyond providing on-the-ground daily GP care to students, Sandra has worked tirelessly as an advocate for student welfare. Year on year, with great enthusiasm, she pushed for enhanced student connection; ensuring the student community is engaged in education programmes and campaigns related to topics such as health screenings, STIs, contraceptive care, women's health, vaccination healthcare and infectious disease management. Providing counsel and guidance on many committees; her commitment has always been to ensure that students' well-being was the focus of all achieved outcomes.

Her dedication shown to her vocation had a deeply positive influence on the well-being of students, faculty, staff and the wider UCD community. Her colleagues and associates wish to take this opportunity to acknowledge and congratulate Sandra on her impactful and remarkable career.

UCD Estate Services

Patrick McCarthy

Paddy joined the UCD Buildings Office (Estate Services) as an apprentice maintenance plumber in November 1973. He was initially assigned to the maintenance team working in the Arts and Commerce Building (Newman Building). Having served his apprenticeship, he then spent a short period working in the Main Boiler House (Energy Centre) moving to the Science Buildings where he spent a large portion of his time at UCD.

Paddy has an eye for detail and takes a meticulous approach in everything he does to ensuring that plumbing systems within buildings worked well and efficiently. He is a popular colleague and made many friends over the years both in Estates and the wider UCD community. On meeting him he would always have a smile on his face in discussing the issues of the day. Along with his appetite for learning Paddy is also a keen musician and accomplished banjo player, the tones of which could be heard at times in the Science area at lunchtimes with impromptu sessions with his colleagues.

June O'Connor

June joined the UCD team back in 2002 as the University planned the opening of the Glenomena Residences and she played a pivotal role in welcoming and interacting with the students who occupied them through the years. For a number of years June was a constant presence on the Reception Desk in Glenomena and was enormously popular with students and staff alike. She was always on hand to lend help or support, no matter how large or how trivial the issue may have been, and endeared herself to all who interacted with her.

In 2010 June turned her generous interpersonal skills to bear in helping the Residence Bookings team assist students with on-campus booking, as well as advice on off-campus accommodation. June was also ever present at the UCD Open Days as she interacted with prospective students and their families in deciding on the various options associated with living in UCD along with providing reassurance in their decisions.

Avril Paterson
While having commenced her relationship with UCD prior to this, Avril started her time working for Copi-Print in the Bureau in Blackrock in June 2009. In her role Avril assisted faculty, staff and students with their print and photocopying needs to best of her ability especially during busy periods prior to submission dates and exams when the demands placed upon her were high. Following on from her time in Blackrock, Avril relocated to Copi-Print Bureau in the John Henry Newman Building where she continued diligently in her role until her retirement this summer. Avril is well thought of by her colleagues and the University community, especially for her help with printing and associated needs. She will be missed by the wider community.

Aidan Grannell
As Director of Estate Services, Aidan was committed to not only 'doing things right but doing the right thing' and instilled a deep desire for constant improvement leaving a lasting impression on all those privileged to work with him. With high levels of enthusiasm and a thirst for improvement, Aidan has been a vibrant force for growth and development in UCD and Estate Services over the past c 30 years.

Having joined the University in 1992, early in his time here he transformed campus operations by amalgamating the Porter and Security teams and pioneered a graduate entry programme which gave birth to Campus Services. With remarkable forethought, he founded both the Campus Duty Manager Panel and the Campus First Response Room in anticipation of the 24-hour campus. When he became Director of Estates in 2004, he oversaw the enlargement of the Belfield footprint and rapid expansion of the building portfolio with the relocation to Belfield of facilities from Earlsfort Terrace and Ballsbridge. In 2014 he oversaw the merger of Commercial, Residential and Hospitality Services with UCD Buildings and Services to form Estate Services. Aidan deeply appreciated the positive impact of Belfield's parkland setting on its community and championed the greening of the campus, both in the protection and development of its landscape and the sustainable use of resources.

Aidan's belief in offering people an opportunity has resulted in countless people across the University, in other universities and across corporate life, owing their start as young graduates and professionals to him. He never wavered in his passionate belief that our guiding principle should always be the improvement of the student experience and the development of people, which will continue with many who have worked with him long into the future.

UCD Human Resources
Michael Flanagan
Michael joined UCD in 1999 as Employee Relations Manager having previously worked in financial services and with the Sunday Tribune newspaper.

He played an important role in the development of the Employee Relations area, and more broadly, the HR function over his many years in the University. He was responsible for the development of a broad range of employment and equality related policies that still form the backbone of the HR policies in the University today. He worked closely and collegially with colleagues across all areas from College Principals, Heads of School/Unit to individual employees and trade union representatives in SIPTU, UNITE and IFUT. He was involved in the successful resolution of many individual and collective issues and represented the University at the WRC (previously the Labour Relations Commission) and the Labour Court.

An avid reader and political anorak (as he would say himself), he also experienced many years of heartache as an enthusiastic Liverpool supporter. In more recent years, they have finally come good for him.

His colleagues in HR, Legal, SIRC and beyond wish Michael, his wife Monica and their two grown-up children all the very best for the future.

Maeve McStay
Maeve, who was People and Organisation Development Administrator, retired in August 2020 following many years as part of the UCD Human Resources team.

Maeve started in the School of Geography in 2002 assisting with the preparation of the Geographical Union Reports and in parallel she also worked as part of UCD's Equality Audit team supporting the Review Steering Committee. In 2005, Maeve moved to Registry, working with colleagues in the Examinations Office before finally joining HR in 2006.

For over a decade Maeve was responsible for providing administrative support to the training course catalogue available to all UCD employees, she assisted thousands of participants attend hundreds of courses. Maeve was an extremely conscientious and dedicated team member, and her accumulated knowledge and experience was critical in dealing with last minute changes and requests which were always resolved in a calm and professional manner.

In every aspect of her work Maeve was diligent, responsive and worked to a very high standard, she was also extremely considerate and thoughtful of her colleagues and would lend support to projects and events whenever it was needed.

Maeve was a pleasure to work with and her colleagues in HR thank her for her many wonderful years of service and wish her all the very best in the years ahead.

Claire O'Malley
Claire, who was Director of People Development and Organisation Effectiveness, retired in October 2020 following eight successful years in the UCD HR Function where she occupied several senior roles.

As the Director of HR Partners, Claire had achieved great success in embedding a now established HR Partner model across the organisation that set the precedent for how partner teams would be implemented across other support functions in UCD. She had developed strong working relationships across the whole organisation and leveraged these to great effect to achieve lasting results.

She progressed to take up the role of Director, People Development and Organisation Effectiveness, which encompassed learning and development for all members of our community, as well as promotions and grading. In this role she achieved a number of notable successes, the embedding of an end-to-end performance and development review (P4G), a Job Families Framework and the Job Sizing Programme, each of these items have had a measurable impact in UCD and across the higher education sector.

It has been an immense pleasure working with Claire and her contribution and delivery leaves UCD with a legacy. Claire's colleagues in HR and beyond send her and her family every good wish.

UCD Research, Innovation and Impact

NovaUCD
Jacqueline Boyd Lyons
In July, Jackie's colleagues were very sorry to see their wonderful colleague retire after 16 years working at NovaUCD. During this time as Senior Executive Assistant, Jackie was a fantastic support to NovaUCD's Directors (Dr Pat Frain, Brendan Cremen and Tom Flanagan) and to Professor J Peter Clinch during his time as Vice-President for Innovation.

Jackie creates a warm friendly atmosphere wherever she goes. She was always ready to enthusiastically support and assist her colleagues and the entrepreneurs at NovaUCD and NexusUCD. She helped to run and manage key events such as the NovaUCD Innovation Awards and the VentureLaunch Accelerator Programme Showcase ensuring these events were a great success.

During the COVID-19 pandemic Jackie became an excellent online host transforming regular in-person events into an expanded and very popular series of virtual events.

Jackie always had a warm smile and genuine welcome for clients and visitors at NovaUCD. She will be very much missed and remembered by all who had the good fortune to meet or work with her.

We wish her every joy and happiness in retirement with her family and friends.

UCD Geary Institute for Public Policy
Professor Philip O'Connell
Philip took up the directorship of the UCD Geary Institute for Public Policy in 2013. Prior to that he was Research Professor and Head of Social Research at the Economic and Social Research Institute.

During his time at the Geary Institute, Philip was successful in broadening the reach of the Institute, both in terms of UCD membership and in relation to engagement and outreach to the Irish, European and international policy community. This is reflected in the change in the Institute name to the Geary Institute for Public Policy and the incorporation into UCD of the online platform Publicpolicy.ie, an infrastructure previously funded by Atlantic Philanthropies and founded by Dr Donal de Buitleir. Publicpolicy.ie aims to provide independent evidence to inform economic, social and environmental policies and to communicate relevant research findings to policy makers and interested citizens.

In addition, under Philip's leadership, the Geary Institute was appointed as National Coordinator for two waves of the European Social Survey in Ireland in 2018/19 and 2020/21. The survey measures the attitudes, beliefs and behaviour patterns of diverse populations in more than thirty nations and as such offers researchers, policy makers and the public the highest quality survey data that is comparable across countries and time.

Philip was also the Irish representative to the OECD Expert Group on Migration, and his engagement with public policy continues with his membership of the Irish Labour Market Advisory Council.

UCD College of Arts and Humanities

UCD School of English, Drama and Film
Pat Cooke

Pat retired in September 2020, having served as the Director of the MA in Cultural Policy and Arts Management since 2006. Under his stewardship the programme has become one of the most successful and largest MA programmes in the College of Arts and Humanities. His previous professional expertise in heritage – as a former director of Kilmainham Gaol and the Pearse Museum – deeply informed his teaching and research.

His contributions to the museum sector included service as the Chairman of the Irish Museums Association from 2002-2006, and as an assessor for the Heritage Council's Museum Standards Programme for Ireland. He is soon to publish a comprehensive history of cultural policy and the Irish state (forthcoming from Routledge).

Dr Finola Cronin

Having finished her career as a performer with Pina Bausch's internationally renowned Tanztheater Wuppertal, Finola began her graduate studies at UCD'S Drama Studies Centre in 1994. She would progress from being the Arts Council Artist-in-Residence to a full-time Drama Studies staff member, teaching a range of modules that combined theory and practice with great originality. With Dr Cathy Leeney, Finola established an MA in Directing for Theatre that would transform into an MA in Theatre Practice delivered in association with the Gaiety School of Acting; Finola would serve as course director for the last five years.

For four years, and just prior to her retirement, Finola, as Subject Head, oversaw the subject's various programmes through multiple strategic reviews and evaluations. Her publications on Dance Theatre have been original, insightful and hugely influential, as have been her contributions as Dance Advisor to the Arts Council, ongoing work as a choreographer and performer, and her participation on boards, including Siamsa Tíre and the Dublin Dance Festival.Such external engagements are in line with the professional values and standards Finola set for herself.

Finola's contributions to the training, well-being, development and academic careers of her students have been astonishing. She dedicated enormous amounts of time to the observation and provision of feedback to students, whether that was devised work-in-progress, performance research activities or undergraduate, graduate or PhD thesis work. For example, Finola convened the Performance Project – an annual production devised by students – she contributed, since its inception, to the shortlisting, recruitment and mentoring of students for the Ad Astra, Performing Arts Academy, and furthered the administration, teaching and learning of our School. Finola's presence, impact and legacy are original, multiple and long-lasting, and her many involvements that will be sorely missed, by colleagues and students alike.

UCD School of Irish, Celtic Studies and Folklore
Dr Dewi Evans

Dewi retired in the summer of 2020. He came to UCD as a temporary lecturer in Welsh. The community of Celtic Studies in UCD were delighted when a permanent post was offered and he was appointed. He took up the post on one condition, that he could immediately take a year's sabbatical to take up a post offered by the British Council teaching Welsh in Patagonia in Argentina. In UCD he made lasting ties, not least Liliana, his wife, who received an MA in Spanish in UCD and worked in the library. Dewi and Liliana have two children, Emrys and Non.

His PhD was on an Irish folktale 'Celfyddyd y chwedl werin wyddeleg: astudiaeth fanwl o'Eochair, Mac Rí in Éirinn' ynghyd â chymariaethau a chwedlau eraill Éamon a Búrc' from the University of Wales, Bangor, examining material in in order to be applied to oral traces in Medieval Welsh literature. His research included a new version of Fynes-Clinton's The Welsh Vocabulary of the Bangor District, as well as work on the antiquarian scholar, Edward Lhuyd and his work with the Welsh language.

Soon after he began in UCD he secured funding for the website Welsh/Irish Lexicelt: www.lexicelt.org/gaeilge.html. Dewi had a good sense of leadership in university administration and his students were devoted to him, particularly those from abroad.

UCD College of Business

Déirdre Linehan-O'Brien
After a dedicated 39 years in UCD, Déirdre, who was Commerce International Programme Manager, retired in December. Following a career spanning the Department of Irish, the School of Medicine and ultimately the College of Business from 1993, Déirdre has been a stalwart of the Commerce International programme bringing calm, care and thoughtful attention to its students and associated staff. A staunch advocate for students in her care, Déirdre has always paid particular attention to helping those in difficulty and taking immense pride when seeing these students graduate each September.

During her time on the programme, Déirdre was tirelessly enthusiastic about the benefits of language learning and the integral study year abroad. Countless hours were spent preparing students for the challenge of the study year abroad and many more hours spent helping them resolve difficulties, major and minor, from Shanghai to Salamanca!

Alongside this, Déirdre was an exceptional colleague bringing her trademark practical wisdom, kindness and support to all situations. She will be missed by all, particularly her colleagues who worked closely with her in the Quinn Programme Office.

The College of Business warmly wishes Déirdre a long and happy retirement with plenty of time to spend with her family and to continue her passion for music and her beloved Our Lady's Choral Society.

Helen O'Dowd
Helen retired in May 2021 after working as the receptionist at the UCD Michael Smurfit Graduate Business School for over 12 years. Prior to joining UCD in 2009, Helen had worked for most of her career with Bank of Ireland. She always ensured that visitors to the UCD Smurfit School were warmly welcomed and treated with the utmost courtesy. Indeed, she greeted all staff with a great smile on many a dull morning and listened to our stories and indeed our woes!

She will be remembered for her warmth, friendship and professionalism.

UCD College of Engineering and Architecture

School of Electronic and Electrical Engineering
Patrick McNally
Pat joined UCD as a technician in 1984 having previously worked for Telectron from 1976-1983 and Mostek. At that time the School of Electronic and Electrical Engineering was based in Merrion Street but transferred to Belfield in 1989.

Pat was one of the most highly regarded members of staff and was promoted to Senior and then to Chief Technical Officer. It is worthwhile noting the breadth of his contribution. His main duties included: Inspection, maintenance, and upgrading of hardware; Design and construction of laboratory equipment; Active contribution to student lab sessions (including Machine Lab installation) and design classes; Support for student projects at every level; Sourcing and purchasing; and PCB design software and construction.

Pat was truly renowned in the school for his wonderful manner in dealing with students: making them feel welcome, being extremely patient with students (and academics), always going above and beyond to ensuring that those he helped fully understood what was going on.

As a regular visitor to Spain, Pat loves all things Spanish. Amongst his many talents he speaks fluent Spanish with a Mayo accent, that many a poor Spanish Erasmus student can testify to. We wish Pat many sunny adventures.

UCD School of Mechanical and Materials Engineering
Professor Gerry Byrne
Gerry was appointed Professor and Chair of Mechanical Engineering and Head of Department of Mechanical Engineering in 1993. Subsequently, he led the College of Engineering and Architecture as Dean of Engineering and College Principal. Prior to joining UCD, he graduated with a doctorate (summa-cum-laude) from the Technical University Berlin and held a senior management position at the Corporate R&D Directorate, Daimler-Benz, Germany.

He is globally recognised as a leading distinguished engineer and researcher in advanced manufacturing engineering. He is an Honorary Professor at Tianjin University, China, an International Fellow of the Royal Academy of Engineering, UK and an International Fellow of the German National Academy of Science and Engineering. He is a Founding-Fellow and Past President of the Irish Academy of Engineering, a Past President of Engineers Ireland and a Fellow and Past President of the world-leading International Academy for Production Engineering (CIRP). He is widely published, is highly decorated for his outstanding contributions and is a recipient of the prestigious Taylor Research Medal of the Society of Manufacturing Engineers, USA. He was awarded the Golden Ring of the German Society of Engineering (VDI) and holds an honorary doctorate in recognition of his outstanding international contribution as an innovator in engineering.

UCD College of Health and Agricultural Sciences

UCD School of Agriculture and Food Science

Associate Professor Mary Forrest

Mary joined UCD in 1986. Following horticultural training in the National Botanic Gardens, she received a state scholarship to study horticulture in UCD, graduating with a BAgrSc. Her four-year An Taisce Heritage Gardens Fellowship cataloguing 17,500 exotic plants in 30 collections in Ireland, published as *Trees and Shrubs Cultivated in Ireland,* and three years as head gardener at Glenveagh National Park, Donegal, during which time she completed an MSc (TCD) in exotic plant conservation in Ireland, were followed by 34 years in UCD.

Mary's teaching and research concentrated on landscape history, design and management, and cut foliage production for which she was awarded a PhD. She made a significant contribution to UCD as Head of Teaching and Learning in the School of Biology and Environmental Science, as Associate Dean for Teaching and Learning in the School of Agriculture and Food Science, and as Head of Section. Mary was academic coordinator of the South China Agricultural College of Life Sciences 2+2 programme in Guangzhou, China, where she travelled annually to deliver one-week intensive modules and acted as an excellent ambassador for UCD. In recent years she was awarded an MA in Carmelite spirituality by York St John University. In retirement, Mary's research on early 20th century horticulture continues.

Associate Professor Alan Hunter

Alan joined UCD in 1973 as a technician in Thornfield station, having first studied horticulture at the National Botanic Gardens. He subsequently obtained a BSc in Horticulture and a PhD in plant biotechnology, followed by a postdoctoral fellowship at the University of California Davis. Latterly he obtained a Professional Diploma in University Teaching and Learning. His teaching concentrated on sportsturf, nursery production, retail horticulture and plant biotechnology. His research concentrated primarily on sportsturf turf nutrition and the role of biostimulants in turf management, and in nursery stock on irrigation strategies. He has supervised many MSc and PhD students. He was external examiner in Ireland and abroad, member of the editorial board of three journals, organiser of several International Society of Horticultural Science (ISHS) symposia, and vice-chair of the ISHS commission on Education, Research, Training and Consultancy.

Alan made a significant contribution to UCD by running the examinations at the RDS for many years. For students, he was the RDS Exams Guy. Comments allegedly made to students include: "Come on now lads, sit down. I know the craic is great but there's an exam to do", and "If you are in the toilet for more than 5 minutes, we will contact the nurse". He settled the students whilst always maintaining exam integrity. Students who sat examinations in the RDS will remember Alan fondly, as will his many work colleagues.

Eamon Power

Eamon retired from his position as Senior Technical Officer in October 2021. His departure from UCD follows over 48 years of distinguished service to Agricultural Chemistry, Soil Science and Food research and teaching. He began his UCD career on 30 April 1973 as a trainee technician in the Faculty of Agriculture at Albert College, Glasnevin. At that time, he worked with the late Drs John-Estrange, John Clarke and Denis Cronin and Professor Desmond McAleese who was the Head of Agricultural Chemistry and Soil Science at that time. When the Faculty of Agriculture relocated to Belfield in 1979, Eamon continued his work in Agricultural Chemistry and Nutrition with Dr Desmond Morgan.

Eamon's extensive expertise and skills in laboratory techniques and compositional analysis continued to be in significant demand following the formation of the Department of Food Science under Professor Brian McKenna in 1993. Up to his retirement, Eamon was the go-to person for undergraduates, postgraduates and postdoctoral researchers who relied on his knowledge and the excellent training he delivered. Always willing to assist, he shared his expertise with many over his lengthy career and did so with a most helpful, cheerful, and friendly demeanour, a trait for which he will be most fondly remembered.

Eamon was also centrally involved in the delivery of many undergraduate practical classes over the years, the most recent including Food Chemistry, Basic Food Analysis, Food Product Development and Sensory Analysis. These practical classes were cornerstones of many courses, underpinning the training and knowledge of graduates in Food Science, Nutrition and Agricultural Science over many years. His colleagues will miss him greatly and wish him the very best in his retirement.

UCD School of Nursing, Midwifery and Health Systems

Peter Donnelly

Peter joined UCD in 2015 following a stellar career in clinical services and nurse practice development. With an MSc in Healthcare Informatics, Peter helped established an electronic healthcare record in partner services and supported the transition of the BSc from the hospital to the university setting in the early 2000s. As Programme Director of the BSc in Mental Health Nursing, Peter displayed commendable leadership during a time of student FTE growth. He had an active role on a number of School committees including chairing, among others, the Registration Programmes Working Group. Peter innovated and had publications in teaching and learning while supporting students and colleagues admirably during the pandemic. He retired in February 2021.

Professor Gerard Fealy

Gerard retired after a long and distinguished career at the UCD School of Nursing, Midwifery and Health Systems. Gerard joined UCD in 1997, having previously held the post of Principal Tutor at Our Lady of Lourdes Hospital, Drogheda. With a background in intensive care nursing at St James's Hospital, he completed his primary degree in nursing at UCD in 1989 and he also obtained a Master of Education degree (MEd) (1995) and a PhD in Education (2003) at UCD. He held key leadership positions at his School, including the UCD Professor of Nursing, and served as the Dean of Nursing and Head of School from 2016 until his retirement.

In a career spanning over 45 years, Gerard led important developments in nursing education and research, including the introduction of the four undergraduate majors in nursing and midwifery at UCD. He also played a significant role in developing global engagement and research policy at his School and led research programmes in social gerontology, nursing history and

nursing policy. A committed teacher, Gerard gave unfailing service to UCD, serving on several University committees and boards. Gerard's students and colleagues wish him a long, happy and productive retirement.

Dr Breeda Howley
Breeda was until her retirement the longest serving member of faculty at the School, having started in UCD in 1993 when the School was located at Earlsfort Terrace. She taught on the then undergraduate nursing degree programme which was developed for nurses and midwives who had trained in the apprenticeship model. Breda also taught on the masters programme in the School where she shared her significant expertise in quality improvement and patient safety with students from very different clinical settings and backgrounds.

Breeda was throughout her career an inspirational educator who always had time for her students and who until her retirement remained popular as a teacher.

Dr Sinead O'Toole
Sinead joined UCD in 1995, having worked as a nurse in Ireland and Australia. She had studied psychology and throughout her career at the School, was committed to developing nurses' and midwives' knowledge of psychology in order to support their work in providing holistic care. Much of her time teaching time was devoted to supporting the development of communication skills in nursing and midwifery students at undergraduate level.

At postgraduate level Sinead drew on her expertise to enhance the understanding of the psychological impact of chronic illness on individuals and how this could be addressed.

She continually advocated for students and was always popular among all students whom she taught.

Dr Ann Sheridan
Ann joined UCD in 2004, having worked as Principal Nurse Tutor in St John of God Hospital for many years. During her early career Ann was also seconded as a Director to the HSE Nursing and Midwifery Planning and Development Team and during her time played a key role in developing specialist and advanced nursing practice education. Having completed her BNS in UCD in 1989, Ann was committed to further study, achieving a MEd in UCD in 1994 and her PhD in the University of Birmingham in 2003.

Over time, Ann held multiple funding awards and grants and notably explored supported socialisation: a randomised controlled trial in mental health, receiving a UCD Runner-up Research Impact Case Study Award in 2018. With over sixty peer reviewed publications, Ann championed mental health in research areas including quality of life in first episode psychosis, nurse staffing models, the recovery model and also through her work as a facilitator in the Hearing Voices Network. As Associate Professor in Mental Health Nursing, Ann retired as Head of Subject in October 2020.

UCD School of Medicine
Brian Bruno
Brian joined UCD's Centre for Emergency Medical Science in 2009, bringing with him more than 25 years of experience in the UK's NHS Ambulance Service, both as a practitioner and trainer. Brian was an invaluable member of the UCD CEMS team, contributing to the ongoing development and delivery of the GradDipEMS / Advanced Paramedic Training Programme and Immediate Care courses for GPs around the country. Brian played an important role in the development and coordination of the UCD Diploma in Military Medical Care with the Irish Defence Forces. Brian retired in August 2021. He was a fantastic colleague and is missed by the UCD CEMS team and other colleagues across the School of Medicine who wish him all the best for his retirement.

Mary Headon
Mary has been part of UCD Academic General Practice since 2005 when she worked as a Research Nurse in UCD Coombe Family Practice. She then moved to an administrative position in UCD Centre for Emergency Medical Science where she coordinated BLS and Emergency Skills days for Medicine and Radiography students, supported postgraduate programmes, coordinated Immediate Care CPD courses for General Practitioners, and supported important research projects – most notably the Medical Emergency Responders: Integration and Training (MERIT) projects, the success of which can be largely attributed to Mary's hard work and commitment. We would like to thank Mary for her work, and we wish her a very happy retirement – a sentiment that we know is reflected by many in the UCD community and by GPs across the country.

UCD School of Veterinary Medicine
Sarah Acton
Sarah was a senior veterinary radiographer who worked for the UCD veterinary hospital for over 20 years transitioning from the human to veterinary hospital system with ease. Sarah was enthusiastic about teaching students on clinical placement, and taught students from the veterinary and veterinary nursing programme as well as elective radiography students. It was this interest in teaching that led her, along with her colleagues Catherine D'Helft and Hester McAllister, to produce two ebooks on radiographic positioning for

both small and large animals, books that are still used with the students today – and often requested by alumni. Sarah's interests outside of work are gardening and golf which retirement will give her the chance to now fully enjoy along with her family and to turn her grandchildren's fingers green.

Michael Garrett

Mick retired in December 2020 having spent 40 years working in the UCD School of Veterinary Medicine. He trained in Kevin's Street and initially worked in serology alongside Patricia Redmond under Professor Brendan Cunningham. Then under Professor Brian Sheahan he became involved in veterinary clinical biochemistry and quickly excelled in this discipline. Working under Dr Hugh Larkin and later Dr Peter O'Brien, Mick worked in the diagnostic laboratories of the veterinary hospital for many years. He was deservedly promoted from senior technical officer (STO) to chief technical officer (CTO) in recognition of his specialist technical skills. He led the tight-knit veterinary clinical pathology technical team of Maureen McCullough, Louise Mooney and himself until his retirement.

Mick is a team player and could always be relied on when urgent samples were required to be processed for sick animal patients. He is precise and meticulous in his work and calls it as he sees it. Thoughtful and quiet by nature, when Mick gives his opinion it is always insightful and constructive.

A devoted family man, Mick loves Skerries, describing himself as a 'Fingalian'. He is a keen walker, regularly seen around the UCD Campus and along the beaches near his home. He loves to travel with a particular highlight being his recent trip to China. A great colleague and all-round good guy, everyone in the Vet School wishes Mick a very happy and well-deserved retirement.

Professor Barbara Kirby

Barbara was a renowned small animal surgeon who headed up our small animal surgery discipline for several years. She was extremely knowledgeable and had an uncanny ability to remember unusual case reports from decades previously and she could lay her hands on the report in seconds. She successfully trained a number of veterinary surgeons to specialist level, some of whom have remained on in our Veterinary School.

Mary-Lou McKeever

Mary-Lou made an outstanding contribution to the running of UCD Veterinary Hospital in a long career that saw her successfully combine numerous skillsets. Having initially qualified as a veterinary nurse, Mary-Lou combined the medical knowledge obtained from her clinical career (both within and outside UCD) with her inherent administrative and people skills to manage all aspects of case referral and reception organisation.

Mary-Lou's pivotal contribution in more recent times was as Hub Coordinator where she pioneered a new initiative that provided the informative and empathetic interface between UCD staff, referring vets and their concerned clients. Her skills in prioritising which cases needed urgent attention and which were more elective in nature was invaluable in allowing effective patient flow that resulted in high quality care without overburdening the hospital's capacity. This task involved her taking on a significant level of responsibility and resulted in protecting staff on the

floor from significant additional stress. The number of clients and referring vets who continue to ask about her since her retirement simply bears testimony to both the respect and affection they continue to have for her.

In addition to her formal work, Mary-Lou was an exceptional team player who contributed in no uncertain manner to maintaining and promoting staff morale and well-being, with a sense of humour and bonhomie that made the place a happy and well-balanced working environment. Thanks for everything, Mary-Lou!

National Virus Reference Laboratory

Philomena Moore

Phil, who was a Senior Technical Officer, retired in May 2021. She began working at the NVRL in March 1981, as a recent graduate from DIT. She worked in all sections within the NVRL over the course of her career. She continuously developed her skills as new technologies were introduced, and as new viruses were discovered, finishing her career in the molecular diagnostics laboratory, where she contributed to the SARS COV-2 investigations.

Phil was a long-standing participant in the out-of-hours on-call service, which facilitated testing for the National Organ Donation Transplant Ireland service, providing urgent viral screening to enable organ donation to proceed. Phil's commitment to the service was highly commendable necessitating a significant commitment of family time. Phil was a dedicated highly respected member of staff, with a keen eye for detail, and her commitment to the patient was always exemplary. She was a valued member of the NVRL team especially at the annual charity cake sale where her excellent baking skills were very much appreciated. Her meringues would win any bake-off competition! We wish her a long and happy retirement.

Alison Kelly

Alison, who was a Senior Technical Officer, retired in November 2020. She joined UCD and the staff of National Virus Reference Laboratory, in January 1980.

She initially worked in the serology laboratory and was part of a team that was involved in the introduction of HIV and Hepatitis testing. She spent the last 15 years in the Tissue Culture and Virus Isolation sections as a Senior Technical Officer where she was instrumental in obtaining accreditation by the World Health Organisation (WHO) as a National Laboratory for Poliovirus and Influenza.

Alison enjoyed being part of the Belfield community, spending time walking, playing tennis and 5-a-side football with colleagues. She was also a member of the UCD Staff Choir which she thoroughly enjoyed. Alison has a wry sense of humour and a deep interest in world politics which gave rise to many interesting discussions.

Alison retired in November 2020 having completed 40 years of service. She is much missed by her friends and colleagues, and we hope she will enjoy a long, happy, and restful retirement.

UCD College of Social Sciences and Law

UCD Sutherland School of Law

Caroline Fine

It was with very heavy hearts we said goodbye to Caroline on Friday 11 December 2020. Colleagues, old and new attended the virtual retirement party. There was much laughter and some tears and the sense that we were really witnessing the end of an era as Caroline was the School's Law Office Director for 21 years.

And while Deans came and went, Caroline was the constant – the glue that kept the School together, the captain of our ship. She shepherded the move from Roebuck to the new Sutherland School of Law building in 2013. And all the while she was doing that – she also did what truly mattered – she reared her own family – the fabulous Eoin, Ruth and Darragh – who joined us at the Zoom party.

One colleague reminded us that we were so lucky that Caroline chose a career in the field of administration, because with her first-class honours degree, she could equally have been an academic, and then we would have lost her to the world of political science! A rock of good sense and full of quiet wisdom, Caroline is irreplaceable, she will be sorely missed on a professional and a personal level.

UCD College of Science

UCD School of Biomolecular and Biomedical Science

Anthony Lumsden

Tony started working in UCD in 2003 as a Laboratory Attendant with the Department of Biochemistry in the Conway Institute. He provided support and assistance for both undergraduate practical classes and research. Coming from a business background Tony was always very eager to learn and increase his scientific knowledge and this led him to complete a Certificate in Natural Sciences with the Open University. He continued with his studies undertaking further scientific courses and specialised laboratory training.

In 2014 all of Tony's hard work led to him taking up a new position within the School as a Technical Officer working mostly with Pharmacology. Tony has been an integral part of the technical team for the past 18 years. During his time with Pharmacology, he developed an expertise in the School's specialised In Vitro Laboratory. Tony has maintained all the equipment in this specialised lab for the past 7 years and has been the go-to person for anything to do with the lab. Without him practical classes would not have run as efficiently as they have. All of Tony's colleagues are very sad to see him leave UCD and we wish him the very best for his retirement. We know that he will keep the golf courses and his local rugby club very busy.

Marie Marshall

Marie retired from UCD in September 2020 after an incredible 48 years' service. Marie started working for UCD in 1972 as a cleaner and was based in Merrion Street with the Department of Engineering. She stayed there until 1989 when she moved to Belfield and started in a new role as a Laboratory Attendant with the Department of Industrial Microbiology in Ardmore House. Marie was an integral part of Ardmore House and was always so willing to take others under her wing, especially any new arrivals.

Marie was a valued member of the Microbiology team and she kept them all in check! She was sad to leave Ardmore House behind in 2014 when Industrial Microbiology moved out of their home into the new O'Brien Centre for Science.

Marie has friends all over campus and it is impossible to go for a walk with her without having to stop numerous times with staff from everywhere wanting to say hello to her. Marie lives just down the road in Donnybrook and enjoyed her '6 minute' bicycle commute every day. Camaraderie and friendship are very important to Marie, and she always made sure to include everyone with her chats and cups of tea. She was the heart and soul of the technical office in the O'Brien Centre, and she will be missed beyond words. Everyone, both in the School and from across campus, wishes Marie so much love on her retirement and we hope that she will continue to come into visit us regularly for a cuppa.

Associate Professor Kathy O' Boyle

Kathy retired in July 2021 after 32 years as a member of the Pharmacology academic staff, leaving a legacy of excellence in pharmacology education and research in Ireland and internationally.

She obtained her PhD in Pharmacology in UCD in 1982. Following 6 years in the Royal College of Surgeons in Ireland as a postdoctoral researcher, research fellow and honorary lecturer Kathy returned to UCD and in 1989 was appointed as Lecturer in Pharmacology and was promoted to Senior Lecturer in 1987. In 1999 Kathy was awarded the President's prize for research. In 2014 Kathy completed the Professional Diploma in University Teaching and Learning.

Kathy's main focus was understanding the role of dopamine, and neuromodulators such as TRH in behaviour regulation and psychosis/schizophrenia. Kathy combined in vitro methodologies, animal and human research to tackle this challenging area of mental illness research, working to increase our understanding of the normal role of the key neurotransmitter dopamine, its receptors and its dysregulation in psychotic disorders.

Kathy was an innovative and influential educator in Pharmacology. She was instrumental in maintaining the pharmacology ethos in UCD and in developing and revising the pharmacology curriculum for science, medical and nursing students through several programme changes and transitions. She was an exceptional leader and mentor to both students and colleagues and her support and guidance of junior members of academic staff in the School was unparalleled.

Throughout her career Kathy made an immense contribution and impact to the UCD scientific and academic community as Head of Pharmacology (2005-2007), Head of Teaching and Learning, (2007-2011), Vice-Principal of Teaching and Learning, College of Science (2011-2014), Chair of the Undergraduate Applications Committee, College of Science (2015-2018) and Chair of the UCD AREC (2018-2020).

All in the School of Biomolecular and Biomedical Science wish Kathy the very best for her next adventures and we will continue to benefit from her wisdom.

Elizabeth Tennyson

In January 2021 we were very sorry to say goodbye to our colleague Elizabeth Tennyson after 18 years. Elizabeth started working in UCD in 2000 with the Department of Botany as a Senior Technical Officer. She worked under the guidance of Professor Martin Steer and was involved in both research and undergraduate teaching. This was a job share position and so allowed her to also work part-time for the Department of Agriculture alongside Professor Ted Farrell. She combined both positions for 4 years and then left UCD. Luckily for UCD we enticed her to return and in 2007 she joined the then Department of Biochemistry as a Senior Technical Officer and continued to work in the School of Biomolecular and Biomedical Science until her retirement in 2021.

Elizabeth was involved in undergraduate teaching, research and outreach work. Engaged in every aspect of the School's activities and always willing to help, Elizabeth will be sorely missed. We know that she will be kept busy with her beautiful grandchildren and her family of whom she is so proud. Her colleagues in the School thank Elizabeth for her many years of service and wish her all the very best in the years ahead.

UCD School of Chemistry

John Creevey

John worked as a laboratory attendant in the undergraduate teaching laboratories in the School of Chemistry for many years. He mostly worked in the first-year teaching labs and was a familiar face to generations of students in Science, Agriculture, Engineering, and other programmes. He helped get the labs prepared for classes and assisted students as they carried out their practical work. He also worked in the Chemistry Stores and for many years was responsible for assembling and selling the lab kits for the students. Unfailingly cheerful, patient and friendly, John always had time for a chat and he was extremely popular with staff and students alike.

UCD School of Mathematics and Statistics

Professor Stephen J Gardiner

Stephen studied Mathematics at Queens University Belfast where he also did his doctoral work. He joined UCD in 1984 and was appointed in 2001 to the Professorship of Mathematics. In 1995 he was awarded the degree of Doctor of Science by Queen's University Belfast based on published research in the field of Approximation, Boundary Behaviour and Convexity in Potential Theory. In 2000 he was elected a Member of the Royal Irish Academy.

He served as Associate Dean in the Faculty of Arts (1996-2002), as Head of the Department of Mathematics (2002-2005) and as School Head of Finance and Staffing (2007-2020). He also held the office of Treasurer of the Royal Irish Academy (2018-2021). At an international level he has served as an Editorial Adviser for the Proceedings, Journal and Bulletin of the London Mathematical Society and is on the Editorial Board of Potential Analysis.

Stephen's retirement ends a long career in UCD both as a dedicated lecturer and researcher. His colleagues in the School of Mathematics and Statistics warmly wish him a long and happy retirement.

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