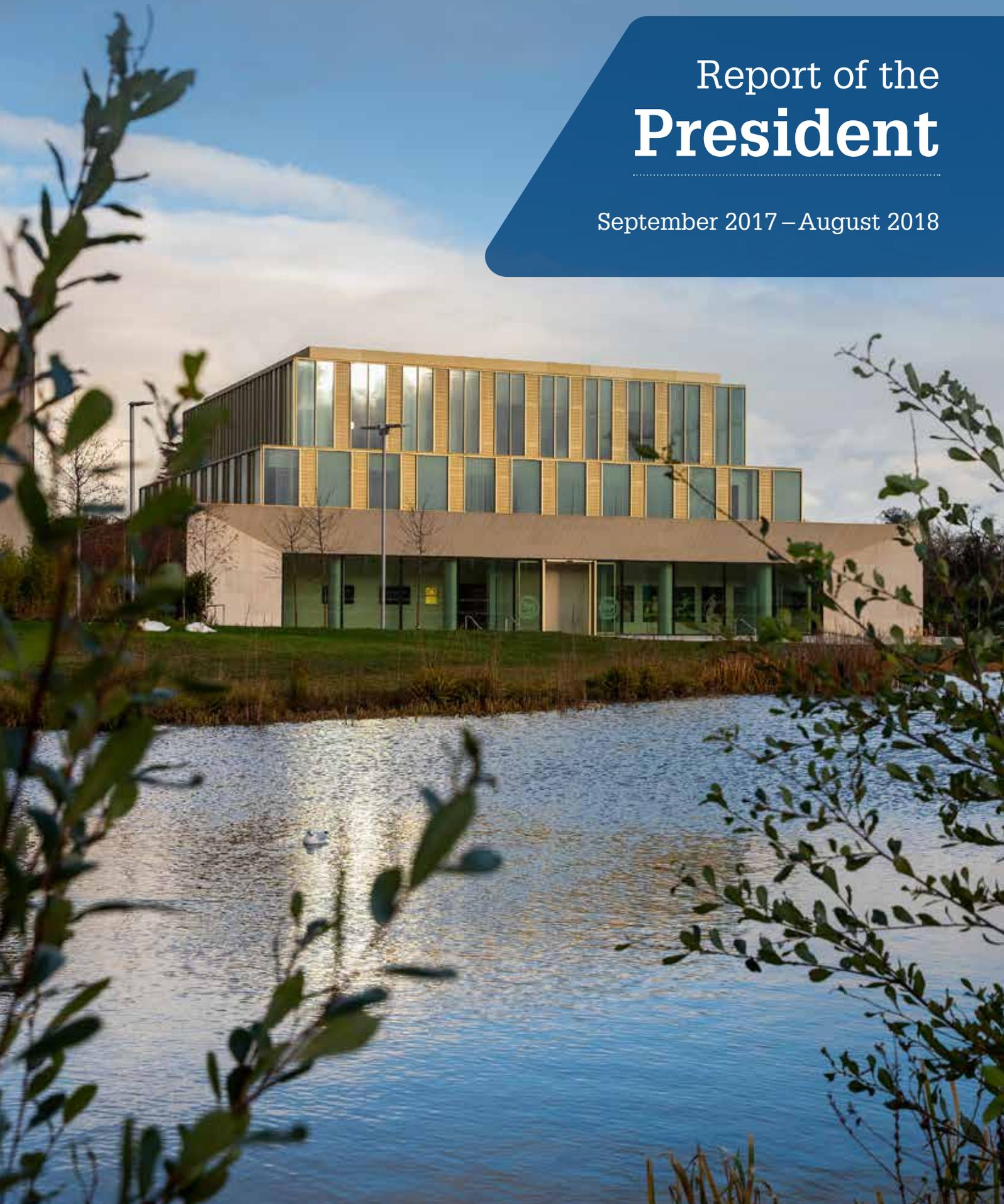




University College Dublin  
Ireland's Global University

# Report of the President

September 2017 – August 2018





## Report of the President

University College Dublin  
National University of Ireland, Dublin

September 2017 – August 2018

For presentation to the Governing Authority  
of University College Dublin, National  
University of Ireland, Dublin at its  
meeting on 12 December 2018.

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# Overview by the President

I am pleased to present my fifth report as President of University College Dublin. Throughout this report you will read of the many successes and accomplishments of our faculty and staff. UCD continues to build its reputation as Ireland's leading and most global university in line with our Strategy 2015-2020.

2017/18 has been a busy year across the University. Our student recruitment has held up strongly, with UCD maintaining its place as the university of first choice for CAO applicants, as well as for international students coming to Ireland. This reflects our growing reputation for excellence in teaching and learning, our research impact, as well as our continuously improving campus facilities.

Underfunding of the sector continues to be the biggest financial challenge facing the University, with consequent pressure on operational and infrastructural sustainability as student numbers increase. Despite successive reductions in State funding and increased demand between 2008 and 2015, UCD made significant progress towards meeting its strategic objectives, while remaining within budget during that period, albeit at the expense of student:faculty ratios, student support services and campus infrastructure.

State funding per student remains virtually unchanged, as the allocation of additional funding announced in this year's State Budget is absorbed by increasing student numbers and by public pay reinstatement and increases. A welcome sign in the Budget was the allocation of some capital funding for co-founded infrastructure projects and for much-needed capital refurbishment. This is the first time funding has been allocated for these purposes during my five years in Ireland, and

although the quantum is insufficient to address current needs across the sector, at least this is a move in the right direction.

Despite the challenges that we face, I am greatly encouraged for the future. There are continuing conversations about the value of a university education and the proportion of the Irish cohort undertaking university level education, but there is still a strong desire in the Irish community to see their children undertake university studies.

In September I announced the departure of two members of the University Management Team (UMT). Dean and Principal of the UCD College of Business, Professor Ciarán Ó hÓgartaigh was appointed as President of NUI Galway and Bursar, Gerry O'Brien was appointed as Chief Operations Officer at the University of Limerick. My personal thanks to both of them for their sustained contributions to UCD during their tenure here.

Professor Ó hÓgartaigh was replaced in May by Professor Anthony Brabazon as Dean and Principal of UCD College of Business. Gerry was replaced as Bursar, also in May, by David Kelly. I congratulate them on these appointments and welcome them to the University Management Team.

In September 2017, as we welcomed our new students to the UCD community, the QS ranking placed UCD as number 1 in Ireland and number 74 in the world for graduate employability. This ranking

Top left: Feeding the swans at the UCD Festival.

includes a number of objective measures of employability including partnerships with employers, internships and employer-student connections on campus that demonstrate our commitment to ensuring our students are prepared for life after university and future success.

Our ambitious plans for the development of the Belfield campus continue at pace. In July, I announced the winner of the Future Campus architectural competition. This competition included both a master-plan for the campus and a statement building to be constructed at the N11 entrance. Steven Holl Architects produced the winning design, taking inspiration from the UCD water tower and from the Giant's Causeway. The building promises to be one of Ireland's most iconic pieces of architecture, providing a symbol of the ambition and vision of the University, while the first phase of the master-plan will include a new teaching and learning building and will provide a connection from the campus entrance on the Stillorgan Road through to the main spine of the campus which dates from the original campus masterplan.

Construction commenced in June on the first phase of our student residence masterplan. This will deliver 924 badly-needed bed spaces for our students. This phase will also deliver new student facilities, including dining options and retail space to be open by September 2020.

In February, I signed the contract for the building of the University Club. It will open in April 2019 and will provide a venue for faculty, staff, researchers, alumni and partners to meet, eat and socialise. Most world-class universities have a venue of this nature, and this project will address a significant gap in our facilities. It will also augment the conference facility of O'Reilly Hall and benefit faculty who bring international academic conferences to UCD.

## Education

Most of our students join us at a critical moment in their lives, a time when they are emerging from a school environment which directs and guides their learning. Their years with us should open their minds to opportunity, personal growth, and new and challenging ideas. This year we have continued to invest in delivering our Education Strategy, with a commitment to strengthening and enhancing our academic programmes. Following the completion of our curriculum review last year, we are implementing the resulting action plans.

This year we launched 'University for All', which will offer a real change in the way the University approaches widening participation, requiring faculty and staff across the University to take ownership of the Access agenda and to ensure that barriers to inclusion are identified and removed. We also concluded the first year of our pilot co-curricular awards schemes 'UCD Embark' and 'UCD Advantage'.

## Research, Innovation and Impact

The past year has seen considerable success for UCD in research, innovation and impact. It was our most successful year ever for research grants, with external awards totaling €122.4 million. This represents an increase of more than 25% on last year, and an increase of €5.5 million over our previous peak. Among the major research

**// Most of our students join us at a critical moment in their lives, a time when they are emerging from a school environment which directs and guides their learning. Their years with us should open their minds to opportunity, personal growth, and new and challenging ideas //**

grants registered this year were two Science Foundation Ireland Research Centres led by UCD: the BEACON Bioeconomy Research Centre and the I-FORM Advanced Manufacturing Research Centre. Industry funding included a major artificial intelligence research project with Samsung Electronics.

Building our capacity to deliver impact from research continues to be an area of focus. We won many awards for our research collaborations across the year. We continue to extend our public engagement, to ensure that our research is influenced by and shared with the public for mutual learning.

## Global UCD

Launched in September 2016, the UCD Global Engagement Strategy has seen continued significant progress during the past year, including the opening of a new Global Centre in Dubai, bringing the total number of centres supporting UCD's engagement overseas to five. This year, our international student numbers increased further to 7,923, representing over a quarter of all students on our Dublin campuses and bringing diversity to our community with students from close to 140 different countries.

In support of UCD's Global Engagement Strategy, the inaugural UCD Global Week for faculty and staff took place in June, and featured an array of speakers from across UCD, Ireland, and our global partners. The week demonstrated the value and strength of our global partnerships, and also highlighted UCD's important and valued place as a dominant player on the world stage in the university and business sectors.

## Equality, Diversity and Inclusion

Our vision for EDI is to be a leader and role model in equality and diversity in the higher education sector nationally and internationally, and for EDI to be at the heart of all we do.

This statement of mission and vision was adopted by the University Management Team as part of the UCD Equality, Diversity and Inclusion policy in May 2018. This policy commits the University to the creation of an environment in which all members of the University community should expect to be able to thrive, be respected and have a real opportunity to participate in and contribute to University activities so that they can achieve their fullest potential.

## Overview by the President

Right: A journey through time with Roman soldiers at the UCD Festival.

Far right: Summer Party for the Homeless in Iveagh Gardens – UCD in the Community, in collaboration with the Dublin Lions Club, hosted a Summer Party with one hundred UCD employees and student volunteers contributing to the success of the event. Over one hundred and thirty homeless people attended and were provided with personal services such as haircuts, chiropody treatments, career guidance and advice. They were entertained with musical performances by UCD Community Choir, UCD Trad Soc, Declan O'Rourke and Mundy.



Socio-economic status was included in the policy as a tenth equality ground, additional to the nine statutory equality grounds.

## Brand and Reputation

Over the last year University Relations launched a multi-annual brand and reputation campaign. Inspired by John Henry Newman's vision 'True enlargement of mind' which is interpreted for a contemporary audience as 'Think Bigger, Go Further, Learn More', the concept behind the campaign is intended as a rallying call for UCD and our community to unleash the unique potential of the individual to meet global challenges and "to benefit the wider world". The campaign supports our strategic objectives by raising awareness of our research and scholarship and by promoting the quality and ambition of our education.

University Relations produced a suite of materials with sufficient flexibility to be used for any specific communication purpose. Their design and content messages are clear, consistent and compelling and each element is rooted in authenticity. The flexibility of the creative theme allows consistency while addressing different audiences including prospective students, research collaborators, employers and industry partners, alumni and funders. This year 'Think Bigger' has been rolled out across all undergraduate and postgraduate student recruitment campaigns and a microsite – [www.ucd.ie/thinkbigger](http://www.ucd.ie/thinkbigger) – was created to host campaign content.

University Relations established a pan-university Communications and Marketing group to assist in the rollout of the campaign and to support the dissemination of the messaging across the University. The campaign imagery has been adopted by UCD College of Science, UCD College of Engineering and Architecture, UCD College of Social Sciences and Law, and UCD College of Arts and Humanities among others, and is now visible across campus in large formats on buildings and internally in a number of locations to share the 'Think Bigger' message with students, faculty and staff.

## UCD in the Community

This initiative, sponsored by UMT member Professor Joe Carthy, supports and promotes civic engagement across the UCD community, and strives to strengthen our relationships with the community and to work together in a collaborative and mutually beneficial way, contributing to positive and sustainable social outcomes. This year's UCD in the Community initiatives include: Volunteer Fair 2017, held in October with over 30 community-based organisations in attendance, to encourage

active participation with voluntary organisations; Summer Party for the Homeless, in collaboration with the Dublin Lions Club, one hundred UCD employees and student volunteers hosted the homeless community in the Iveagh Gardens in May; Outreach Lab and Classroom – Science Suite, 937 students from across Dublin took part in Science Outreach programmes and visits to the Cormac Kilty Discovery Suite; Walk While You Can, supporting former UCD chaplain Fr Tony Coote during his 535km walk from Letterkenny to Ballydehob, highlighting the plight of Motor Neurone Disease sufferers in Ireland; Health Awareness Checks by students and staff from the UCD School of Nursing, Midwifery and Health Sciences in shopping centres in socio-economically disadvantaged areas; and a number of successful fundraisers in aid of the Dublin Simon Community, The Capuchin Day Centre, The Alice Leahy Foundation, Hatch Hall (Direct Provision Centre) and Homeless Period Ireland.

## Strategic Partnerships

Building Partnerships, one of the University's six Major Strategic Initiatives, is an integral part of the vision for the growth and development of the University. Over the last year we have made further significant progress in building partnerships with organisations based here in Ireland and internationally in areas such as talent development, research and innovation and corporate social responsibility. Building partnerships with industry and other organisations in a structured way is crucial to enable UCD to maximise our relevance and impact on society, while at the same time augmenting our student experience and researcher engagement.

We will continue to strengthen our relationship with industry by building major strategic partnerships with a select number of organisations.

ICON and UCD continue to further develop the existing strategic partnership, including the ICON Chair in Business Analytics, the ICON University (a partnership with the UCD College of Business, to support talent development within ICON), together with collaboration with UCD College of Health and Agricultural Sciences, primarily including the UCD Clinical Research Centre.

AIB, through its strategic partnership with UCD, has enabled substantial investment to be made in support of a range of education, research and innovation activities and initiatives in the University, including the establishment of the AIB Chair in Behavioural Economics.

The successful Intel/UCD Masters Student Scholarship Programme continues, and I participated in the second annual Scholarship Awards Ceremony at Intel's campus in Leixlip in January. We are also grateful



for Intel's support for and involvement in the UCD-led Science Foundation Ireland I-Form Advanced Manufacturing Research Centre.

This year has also seen a continuation of existing projects with Dún Laoghaire Rathdown County Council, such as the UCD Festival and Music Generation Programme.

Microsoft has established a scholarship fund in support of the Professional Diploma in Education Studies (Computational Thinking) programme, jointly run with UCD School of Education and UCD School of Computer Science. In addition, Microsoft has established a scholarship programme in Computer Science for female students.

PwC and UCD are developing a strategic partnership which will promote education and talent development. Representing a large investment over a seven-year period, the agreement will see PwC and UCD work together on education and talent development, thought leadership and innovation and corporate social responsibility.

CONSUS, the strategic partnership between UCD and Origin Enterprises, continues in the area of future farming systems. The multidisciplinary research teams at UCD will use their research expertise in data science and agriculture, together with Origin's industry experts, to address the issue of crop sustainability, a major global food security challenge.

UCD and Bristol Myers Squibb are developing a strategic partnership in talent development, research and innovation and corporate social responsibility. Future research collaboration will see both organisations working together in the area of advanced biopharma manufacturing.

Our strategic partners now employ more than 4,000 of our graduates, and have created hundreds of internship positions for our students over the past number of years, together with supporting substantial education and research initiatives in the University.

## Alumni Supporting the University Globally

With over a quarter of a million alumni in over 165 countries, I am very proud to report that UCD's global alumni network is stronger than ever. Bound together by a shared university experience, our influential alumni continue to be one of the University's greatest strengths and speak to our reputation as Ireland's Global University.

Over the last year, we have seen our alumni becoming even more engaged with UCD. Over 2,000 alumni volunteers gave generously of

their time, advice and experience to support current students and the University through the newly established UCD Alumni Volunteering programme which enables the alumni community to create meaningful engagement at all levels of a student's journey through UCD. I would like to thank our alumni for helping to shape this journey through career mentoring, speaking at career development events, helping to welcome international students to Ireland, volunteering at UCD events and hosting global chapter events.

I would also like to thank the 3,500 UCD alumni who support students through our UCD Champions regular giving programme. Raising €1.8 million in financial support to enhance the student experience through various initiatives, including the funding of library books, essential equipment, active learning environments and student scholarships.

Over the past year, we have worked to build our global alumni relationships and have hosted 170 alumni gatherings, reunions and events globally. These events included world-class speakers and celebrated alumni achievement, while also facilitating our alumni to meet and reconnect. In November 2017 we hosted the fourth UCD Alumni Awards, where we honoured ten outstanding alumni nominated by the UCD community. Awardees were recognised for achievements in the arts, health, veterinary medicine, science, business, agriculture, engineering, academic research, social science and law.

Other highlights this year included the launch of the Oireachtas Affinity Group at a special event in Leinster House in February. We also hosted the third UCD Women in Leadership conference with over 630 alumni, students and professionals attending.

During 2017/18 year, we hosted alumni receptions with our local UCD Chapters in global locations including: Perth, Melbourne, Sydney, New York, Boston, San Francisco, Washington DC, Beijing, Shanghai, London, Paris, Brussels, Saudi Arabia and United Arab Emirates. Alumni guest speakers, the Department of Foreign Affairs and various Irish networks were engaged in many of the events.

Another highlight of the year was the UCD Festival, which took place on a very sunny Saturday on 9 June. Over 16,500 UCD alumni, staff, students and members of the local community joined us for a day of creativity, innovation, discovery and research. Now in its third year and bigger than ever, the UCD Festival was a 'one day showcase' of UCD with over 100 events across six Festival zones, and provided plenty of education, entertainment and excitement.

Thank you to our global alumni whose continued support continues to make UCD a truly outstanding University.

## Philanthropic Giving

Thank you also to our alumni, friends and partners who have donated to UCD, making 2017/18 an exceptional year for philanthropic support. Their generous support and commitment to progressing UCD's strategic objectives continues to inspire us. Every gift, no matter the size, helps to support our future success.

The influence of our donors' altruism stretches far beyond our campus. Thanks to the generosity and foresight of a religious order, Professor Deirdre Raftery and Associate Professor Marie Clarke in UCD School of Education are now able to lead a multinational research project which is examining the experiences of women teachers in India and Pakistan, with particular reference to addressing barriers they face in accessing higher education and opportunities for career progression.

A momentous donation from a generous benefactor, in honour of her late husband, towards the development of our UCD Lochlann Quinn School of Business has enabled the project to progress apace, and we look forward to opening this much needed new extension in 2019.

Philanthropy also allowed us to launch the aforementioned international design competition to enliven and enhance the University's extensive campus, creating a highly-visible and welcoming entrance precinct as well as a charismatic new architectural addition, The Centre for Creativity. The competition attracted global attention resulting in 98 teams from 28 countries entering the competition. Stephen Holl Architects was selected as the winner and we are excited about the transformative effect this Future Campus will have on our students, faculty, staff and visitors alike.

An exceptional donation from a close friend of UCD will realise our ambition of developing a new, state-of-the-art running track.

Situated in the designated Sports and Recreation Character Area, the eight-lane IAAF-approved track will provide training and competition facilities for both track and field events.

MoLI, the Museum of Literature Ireland, a partnership between UCD and the National Library of Ireland will be a new landmark cultural institution located in Newman House on Stephen's Green. Generously supported by extraordinary leadership giving and numerous other critical donations, MoLI will celebrate our internationally-renowned literary culture and heritage from the past to the present, inspiring the next generation to create, read and write. We hope to welcome you to the launch of MoLI in early 2019.

Philanthropic support from friends across Ireland and overseas has been instrumental in enabling UCD to develop its research capabilities, establish new innovative programmes and provide scholarship opportunities to deserving students.

As we look to the future, we will need ongoing support from current and new donors for our ambitious campus development plans, which will continue to enhance the student experience, build capacity, increase research output and enhance the standing of UCD and our graduates both here in Ireland and around the world.

**Professor Andrew J Deeks**  
UCD President

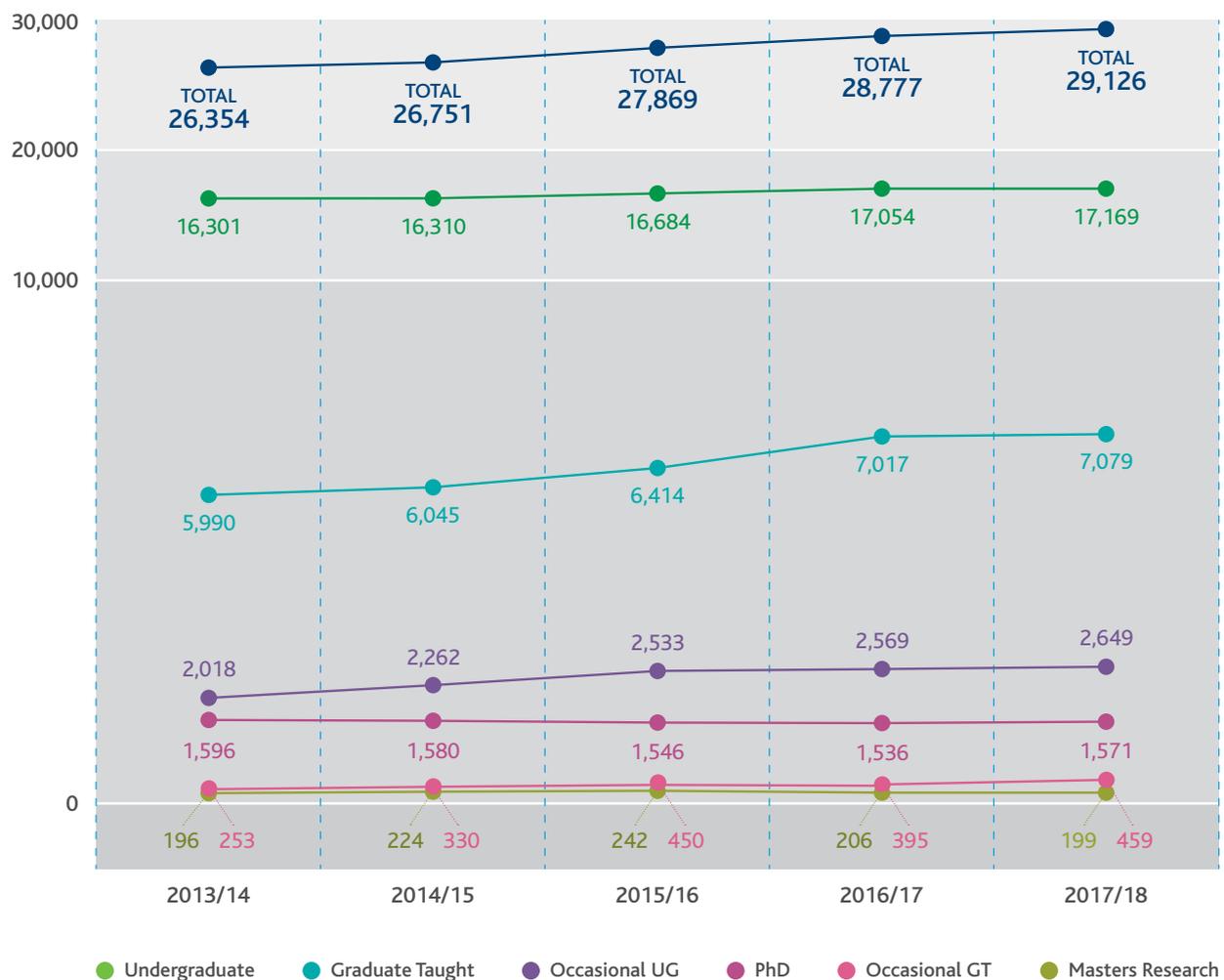


Pictured above: UCD Alumni Awardees 2017, Michael McGlynn, Dr Sheila Willis, Paul O'Donovan, Eamonn Sinnott, Mary Sutton, Dr Garrett Fitzgerald, Caoilfhionn Gallagher, Dr Des Rice, Dr Edmond Harty and UCD President, Professor Andrew Deeks.

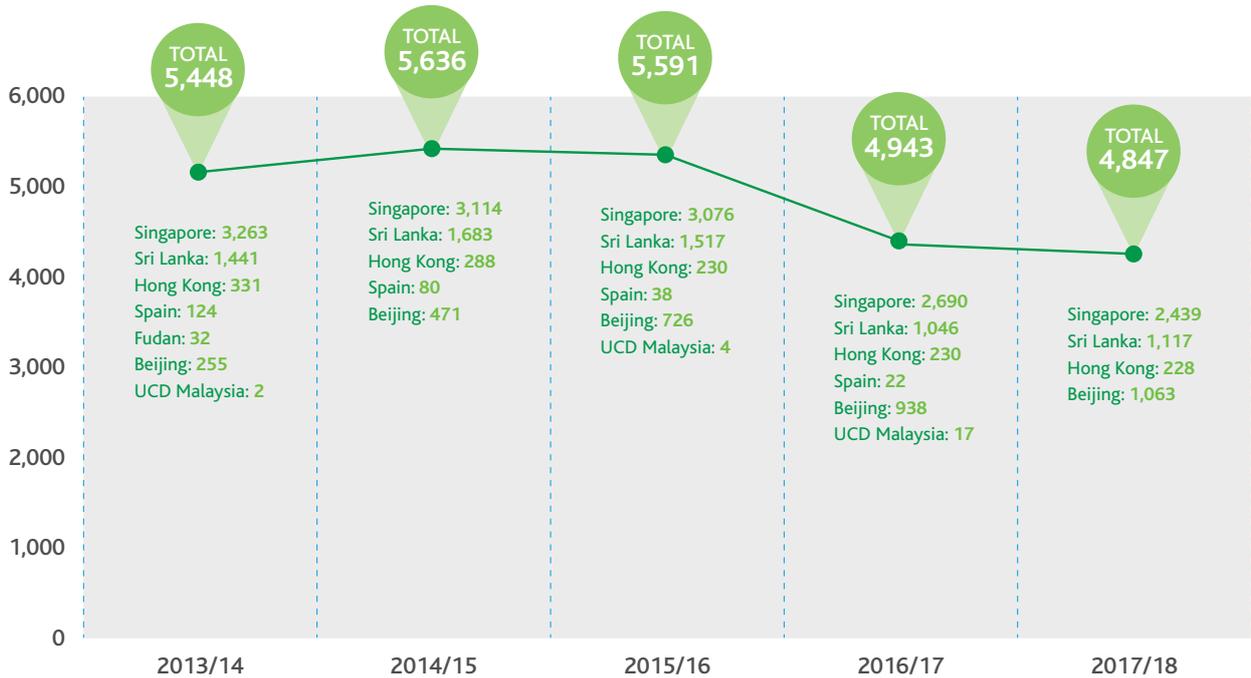


# UCD by Numbers

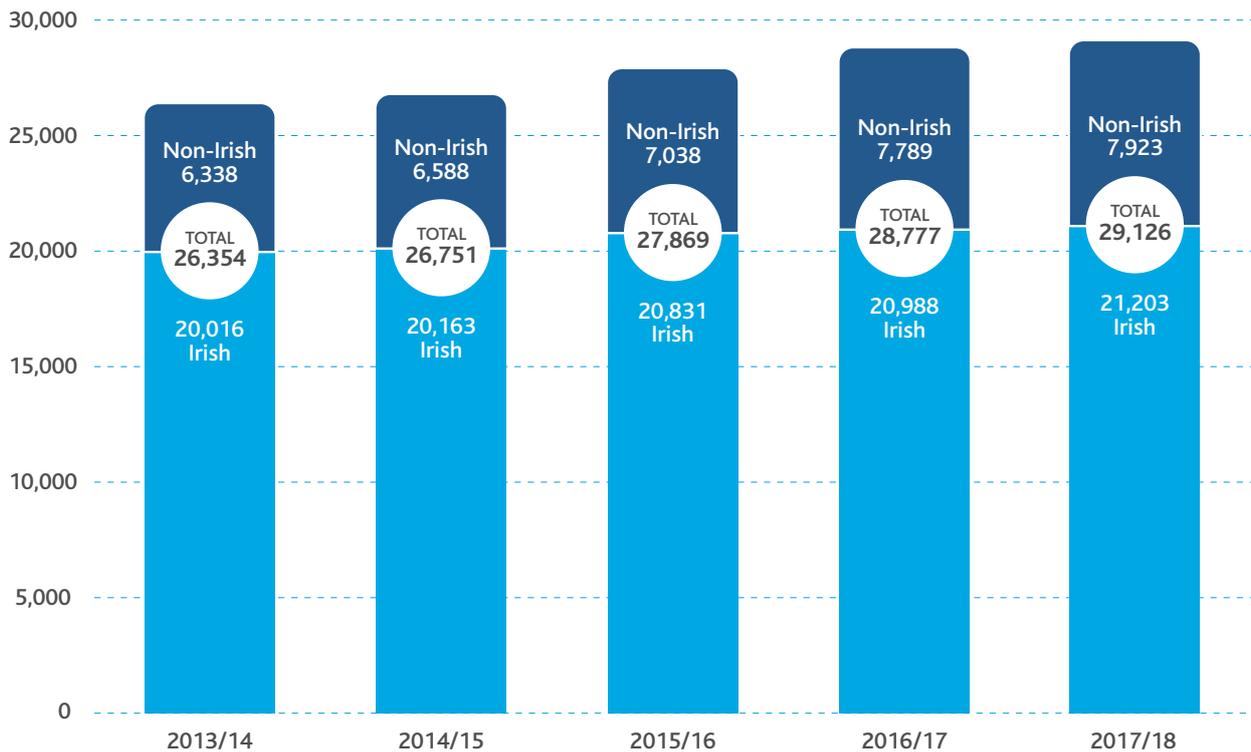
## UCD Student Statistics Ireland Campuses



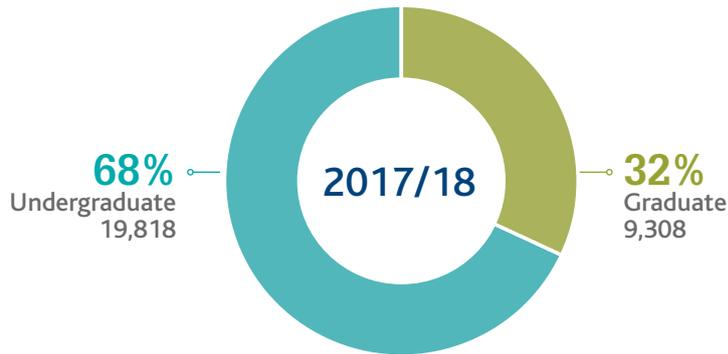
## UCD Student Statistics Overseas Operations



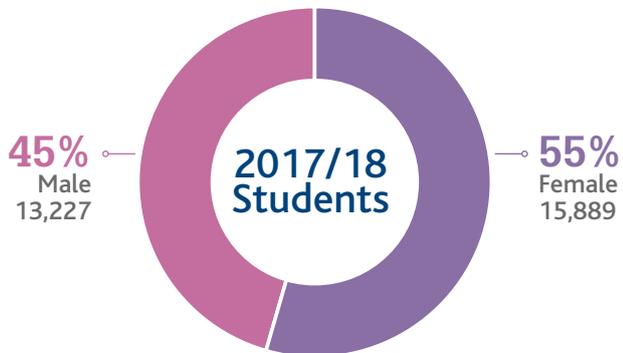
## UCD Students in Ireland



## UCD Undergraduate/Graduate Breakdown



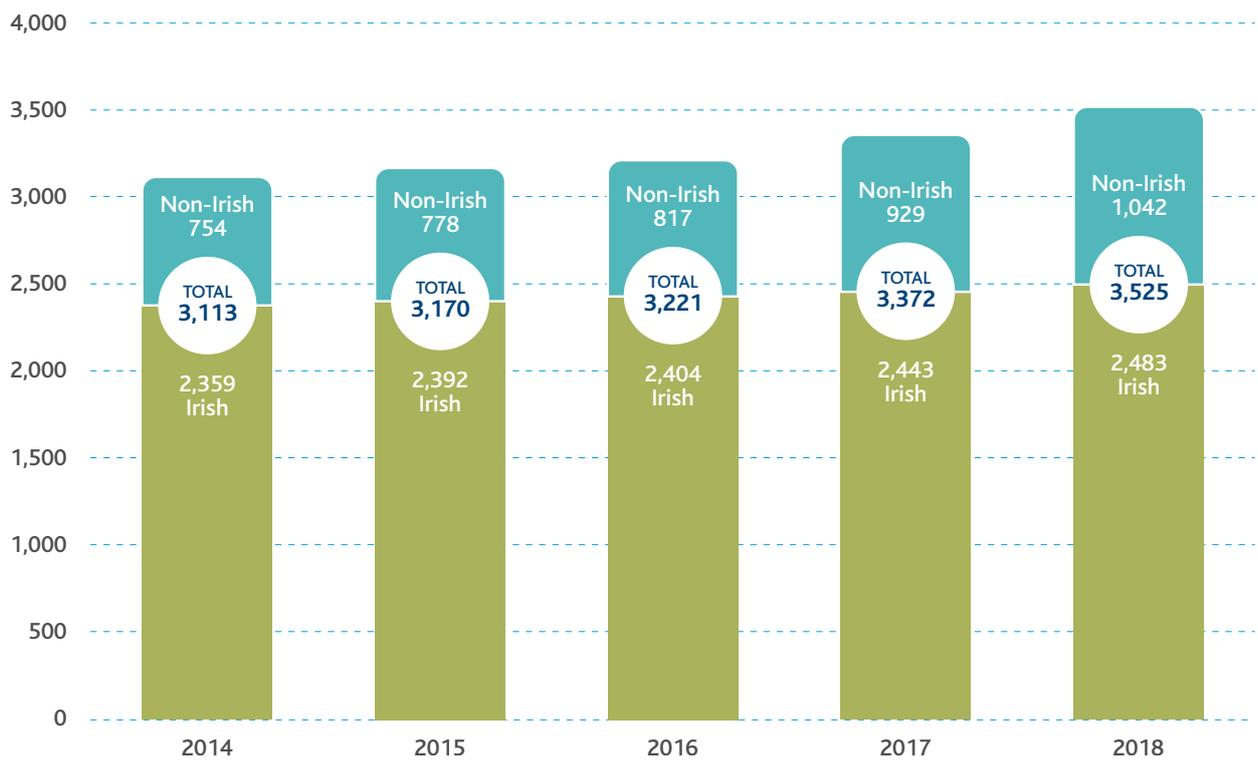
## UCD Male/Female Students



## UCD Male/Female Staff

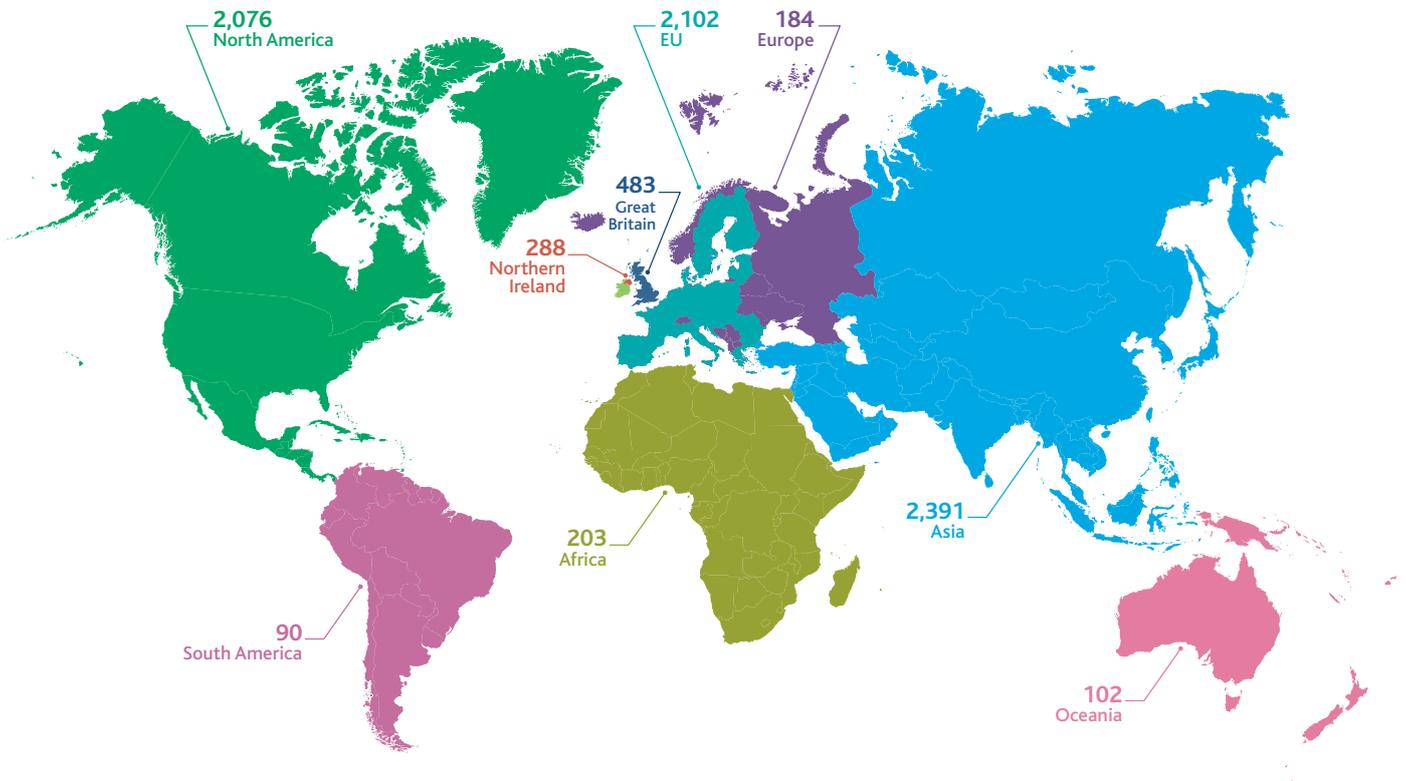


## Staff Statistics in Ireland



## UCD International Students by Region

2017/18



## UCD Undergraduate and Graduate Numbers by Discipline

Ireland 2017/18

Subject Area	Undergraduate	Graduate	Total
Generic programmes and qualifications	253	–	253
Education	20	587	607
Arts and humanities	3,945	385	4,330
Social sciences, journalism and information	1,731	819	2,550
Business, administration and law	3,834	2,222	6,056
Natural sciences, mathematics and statistics	2,212	1,026	3,238
Information and Communication Technologies (ICTs)	460	712	1,172
Engineering, manufacturing and construction	1,640	989	2,629
Agriculture, forestry, fisheries and veterinary	1,745	561	2,306
Health and welfare	3,794	1,989	5,783
Services*	184	18	202
<b>Total</b>	<b>19,818</b>	<b>9,308</b>	<b>29,126</b>

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.

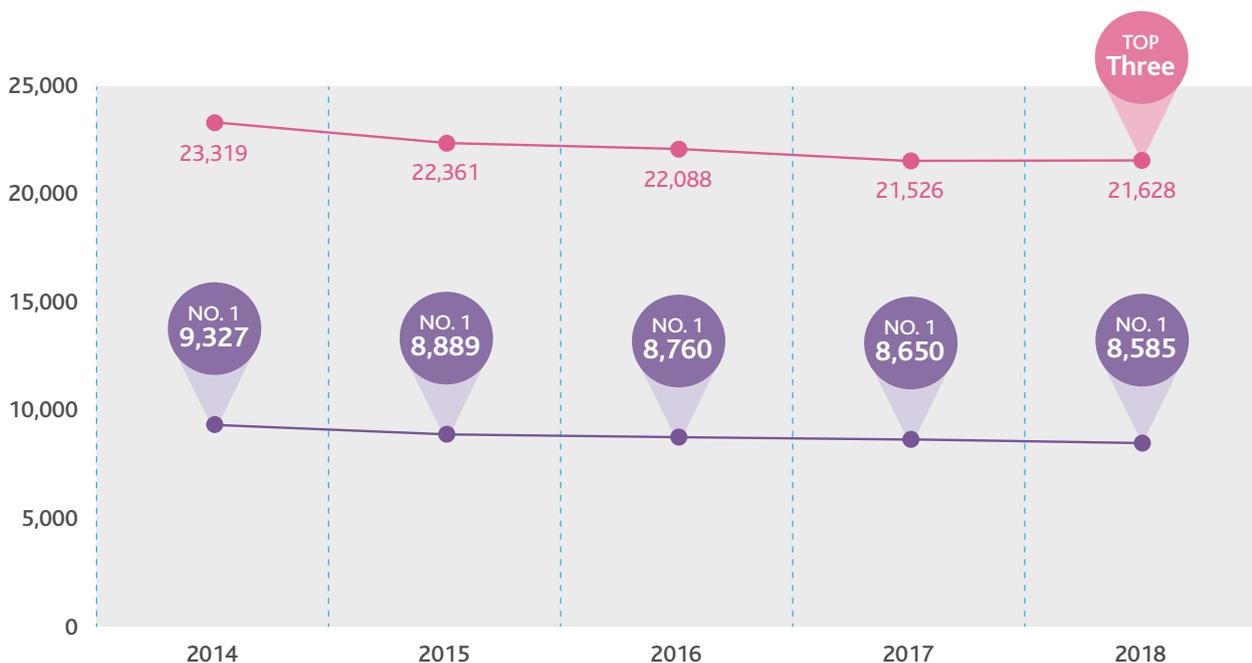
\* Services include programmes such as Safety and Health at Work.

## Top 20 Countries UCD Alumni\*

 <b>202,037</b> (1) Republic of Ireland	 <b>2,957</b> (8) France	 <b>880</b> (15) Malaysia
 <b>13,023</b> (2) United States	 <b>2,764</b> (9) Germany	 <b>750</b> (16) Belgium
 <b>11,379</b> (3) Singapore	 <b>2,068</b> (10) Spain	 <b>702</b> (17) Netherlands
 <b>8,470</b> (4) United Kingdom (England, Scotland, Wales, Northern Ireland)	 <b>1,650</b> (11) Canada	 <b>511</b> (18) Switzerland
 <b>4,846</b> (5) Sri Lanka	 <b>1,428</b> (12) India	 <b>393</b> (19) Austria
 <b>3,093</b> (6) China	 <b>1,356</b> (13) Italy	 <b>373</b> (20) Sweden
 <b>3,022</b> (7) Hong Kong	 <b>1,183</b> (14) Australia	

\* Alumni for whom we hold contact details.

## CAO 1st Preferences





# Education

## Introduction by the Registrar and Deputy President

Most of our students join us at a critical moment in their lives, a time when they are emerging from a school environment which directs and guides their learning. Their years with us should open their minds to opportunity, personal growth, and new ideas.

Our campus provides the infrastructure to allow an experience that goes well beyond the boundaries of a subject, extending to space for personal and professional development through sports, societies and other community activities. Nonetheless, if we are to provide the richest of experiences, the diversity of our physical campus must be matched by the diversity of our students, staff and faculty. Excellence is achieved through inclusion, through the different ideas and life experiences which come from different cultures and social backgrounds, both Irish and international.

Our focus is on supporting our staff and faculty in providing the best experience to our students in Belfield, Blackrock or throughout the world. This year we have continued to invest in delivering our Education Strategy and in the following pages, developments across the portfolio of activities are reported. It is important to remember that much of the routine activity in the University is not reflected in these pages. It appears in the successful delivery of the education and student experience we provide daily, to the thousands of students who attend classes and participate in the wider life of the University.

A commitment to strengthening and enhancing our academic programmes underpins the education and experience strategy and following the completion of our curriculum review last year, we are implementing the resulting action plans. They will ensure students develop both discipline-specific and a wider set of attributes and capabilities. More members of faculty are now taking Professional Programmes in University Teaching and Learning, and the

nominations for our University Teaching and Learning awards, which value the impact of our teaching, have also increased. It is the people that make a University and many innovative initiatives are delivered by our faculty and staff. This year we launched 'University for All' which will offer a real change in the way the University approaches widening participation, as it requires everyone to take ownership of the Access agenda to ensure that barriers to inclusion are identified and removed. We also concluded the first year of our pilot co-curricular awards schemes 'UCD Embark' and 'UCD Advantage'. These schemes are designed to encourage participation in wider university life by recognising the skills and capabilities acquired from social and community activities and we expect them to grow significantly over the coming years.

In September 2017, as we welcomed our new students to the UCD community, the QS ranking placed UCD as number 1 in Ireland for graduate employability, a demonstration of our commitment to ensuring our students are prepared for life after university and future success.

**Professor Mark Rogers**  
**Registrar and Deputy President**

## Strengthening and Enhancing Academic Programmes and Disciplines

UCD has continued to strengthen and enhance our students' academic experience through the further development of our online registration systems, the provision of structured and discovery electives, significant investment in our new VLE platform Brightspace, continued support for teaching and learning and securing national recognition for our efforts in widening access and participation.

### Online Registration

The 2017/18 academic year saw the development and introduction of an enhanced student registration system. Following feedback from students, the registration process is now more intuitive with new video guides and more focussed timetable information. The introduction of this system has made registration much easier especially for students registering for Stage 1.

### Structured and Discovery Electives

As part of the continued enhancement of our UCD curriculum, students can now access a range of structured electives over the course of their studies. In 2017/18 there were 18 Structured Elective Programmes offered in the following areas: Applied Languages (Applied French, Applied German, Applied Japanese, Applied Spanish, Chinese Language, Chinese Studies, French, German, Portuguese, Italian and Spanish), Food – Agriculture and Environment, Food – Diet and Health, Horticulture, Humanitarian Action, Mathematics with Applications, Social Justice and Structural Linguistics.

With the introduction of Discovery Electives, faculty have embraced opportunities to engage in trans-disciplinary teaching across a range

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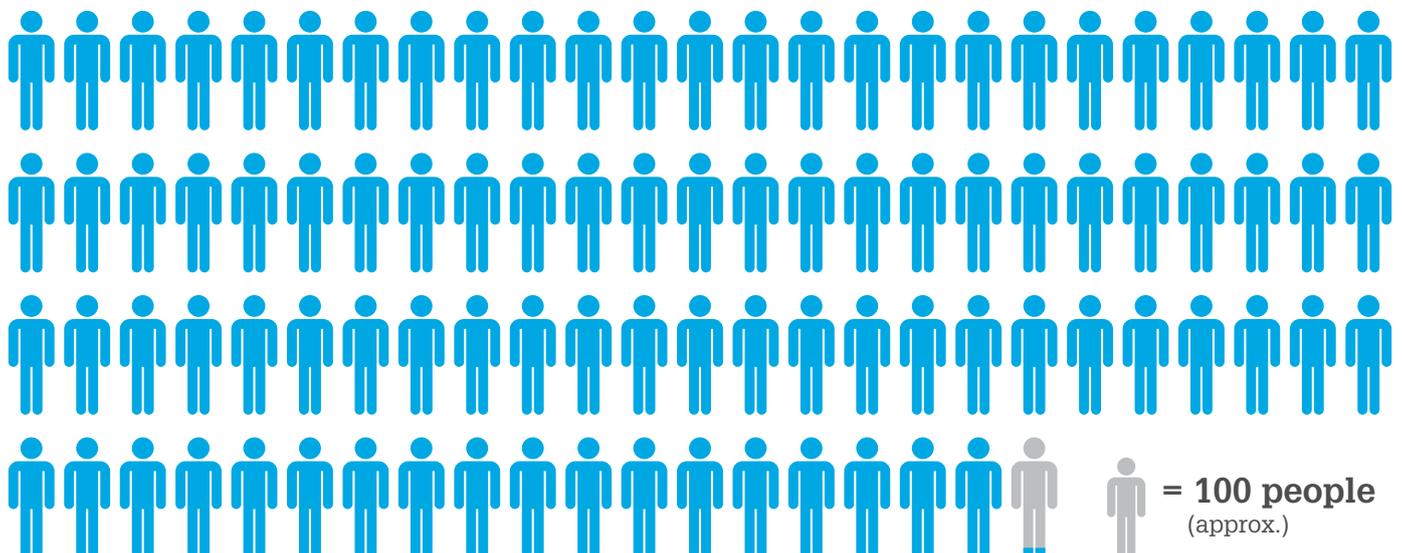
of new electives, in areas as diverse as Global Development Goals, Science Revolutions, Childhood, War: Ancient and Modern, Energy, Climate Change and Policy, Gateways to Japan and Materials in Society. Discovery Electives have also proven very popular with students who are availing of the opportunity to explore areas outside their core subject areas.

### New Virtual Learning Platform: Brightspace

A major initiative (which concluded this year) was the Future VLE Project which provided faculty, staff and students in UCD with the opportunity to reflect on our existing needs in technology enhanced learning. Following consultation and review, the platform Brightspace was chosen based on its pedagogical capabilities, flexibility, accessibility and its user friendliness. The transition to Brightspace is underway. The Early Adopter cohort consisted of 100 modules and approximately 3,000 students successfully moving to the new platform. UCD IT Services are continuing the migration of content for the next cohort (2,000 modules) in preparation for January 2019. A training programme for faculty was also developed and will be

**9,308** UCD Graduate Students in Ireland

**16%** Increase in the Past Five Years



## // A VLE training programme for faculty was developed. This is a significant investment in teaching and learning by UCD //

provided throughout the implementation phase. This is a significant investment in teaching and learning by UCD and will provide students and faculty with new and exciting opportunities to further enhance the teaching and learning experience in UCD. The University will have transitioned fully to the new VLE by August 2019.

### Teaching, Learning and Assessment

On 21 March, Minister Mary Mitchell O'Connor TD opened the national DELTA awards which are new major national level awards for disciplinary excellence in learning, teaching and assessment in Irish higher education. One of the eleven DELTA awards was presented to the UCD Radiography and Diagnostic Imaging Group (a section within the UCD School of Medicine), for their submission 'Incorporating educational and healthcare technologies to enhance Radiography and Diagnostic Imaging education and training'. UCD Radiography and Diagnostic Imaging is recognised internationally as a leading centre for radiography education, based on their innovative approaches to teaching, learning and assessment, and leadership in teaching and learning.

In November 2017, UCD hosted a joint workshop with TCD on 'Enabling Programme Focused Approaches to Assessment', which was part-funded by the National Teaching and Learning Forum.



Pictured at an event are UCD T&L educational developers (l-r): Mr David Jennings; Assoc Prof Geraldine O'Neill and Dr Terry Barrett.

The workshop was facilitated by Professor Tansey Jessop of the TESTA project (Transforming the Experience of Students Through Assessment), a research and change process which has been used in more than 50 UK universities and internationally. Faculty welcomed the opportunity to reflect on new approaches to assessment. Also in November, in recognition of the growing numbers of international students, UCD Teaching and Learning and UCD International jointly hosted a seminar on 'Teaching International Students – academic and pedagogical considerations'. This seminar was facilitated by two internationally recognised experts in this area Professor Betty Leask and Professor Elspeth Jones.

UCD was delighted to welcome Professor Tony Harland from the University of Otago, as keynote speaker at the symposium 'Expanding and Developing Your Assessment Practice' in May 2018. To describe



Pictured at T&L Symposium 'Expanding and Developing Your Assessment Practice' are (l-r): Mr Harry Conway, University of Glasgow; Dr Susan Deeley, University of Glasgow; Associate Professor Marie Clarke, Dean of Undergraduate Studies, UCD; Professor Tony Harland, University of Otago New Zealand; Ms Maura McGinn, Director of Institutional Research, UCD; Ms Áine Galvin, UCD Teaching and Learning; Professor Mark Rogers, Registrar and Deputy President, UCD.

the consequences for teaching and learning from the proliferation of graded assessment tasks across programmes, he spoke on the theme of the 'assessment arms race'.

### Assessment and Feedback Project

A programme-level focus on assessment and feedback was the theme supporting programme enhancement activities in 2017/18. The views of programme directors were sought as part of an assessment and feedback project, with the UCD Students' Union, Access and Lifelong Learning and programme teams also participating. In consultation with the Vice-Principals for Teaching and Learning, seven UCD Programme Assessment and Feedback Principles were written for faculty and staff to incorporate into programmes.

In line with the same theme, the UCD symposium entitled 'Expanding and Developing Your Assessment Practice' was attended by over 100 faculty and staff. Attendees identified manageable ways to provide effective feedback in a timely manner, particularly with large class sizes as a key assessment and feedback challenge. An overview and analysis of student feedback from the Irish Survey of Student Engagement and the UCD Student Feedback on Modules survey, along with national and

international comparison data, helped to provide insight into areas where UCD is doing well and where there is room for improvement with assessment and feedback. Increased clarity around grading criteria and more peer-review and group work were some of the emerging themes.

### Access and Inclusion

UCD's commitment to mainstreaming access and inclusion was formalised under University for All and launched by the Minister for Higher Education, Mary Mitchell O'Connor, TD on 30 November 2017. University for All is an initiative that weaves inclusion into the fabric of the University at every level, and in so doing, moves student access, participation and success from the margins to the mainstream. Its aim is to extend access beyond entry, to include access in an inclusive learning environment designed for the full range of human diversity. The UCD Access and Lifelong Learning Work Plan is a cornerstone of UCD's strategy to become a diverse and inclusive scholarly community and to achieve 33% representation at undergraduate level by 2020 from communities experiencing low progression rates to higher education. In 2017/18, almost 30% of the undergraduate population in UCD now comes from under-represented student groups.

## Widening Participation – Undergraduate Programmes (Certificates, Diplomas and Degrees)

	2015	2016	2017	2018
Socio-economically disadvantaged students (full time degree only) (1)	1,746	1,320	1,406	1,120
Students reporting a Disability (full time) (2)	1,349	1,473	1,564	1,940
Students reporting a Disability (part time)	48	51	59	17
Mature students (full time) (3)	967	1,021	1,060	923
Mature students (part time)	814	836	796	830
Part Time and Flexible Learning (4)	1,006	1,064	910	1,094
FETAC/HETAC (full-time)	262	178	291	345
<b>All UCD Widening Participation Students</b>	<b>4,437</b>	<b>4,755</b>	<b>4,965</b>	<b>4,993</b>
<b>Total UCD Undergraduate students</b>	<b>16,310</b>	<b>16,687</b>	<b>17,054</b>	<b>17,169</b>
<b>% Widening Participation Students</b>	<b>27.2%</b>	<b>28.5%</b>	<b>29.1%</b>	<b>29.1%</b>

New Entrants to Undergraduate Degrees – Supplementary Admission Routes	2015	2016	2017	2018
HEAR	234	269	210	253
DARE	153	233	246	264
FETAC	72	100	99	107
Mature	233	193	184	196

### Notes

- (1) Students from socio-economic groups D, F & G
- (2) Students who report a disability either through registration for supports with Access and Lifelong Learning; admission through DARE; OR indicating a disability on the Equal Access Survey
- (3) Students aged 23 years and over on year of entry to UCD, with no previous undergraduate degree
- (4) Part Time, including Open Learning

A further example of our commitment was the mainstreaming of the Cothrom na Féinne Scholarships, (formerly the Widening Participation Scholarships) which are now awarded as part of the UCD Entrance Scholarships. Named after UCD's motto 'justice and equality', they offer financial, academic and personal support to enable students from a diverse range of backgrounds to succeed at UCD. Over 100 access students received these awards this year.

In 2018 UCD's strong leadership in this area was recognised by the HEA award of PATH 1, 2 and 3 funding proposals, awarded to the UCD-led consortium (IADT, MIE, NCAD, TCD) to increase access to higher education for under-represented student cohorts. Specifically: €200,000 was awarded under PATH 2 for a new 1916 Bursary Fund. A total of 40 bursaries of €5,000 each were awarded: 8 to UCD access students. Under PATH 3, €989,487 was awarded to develop partnerships for increasing access to higher education through creative summer schools, open learning initiatives, mentoring and learning cities.

### Technology Enhanced Learning

To assist with the incorporation of blended learning into programmes 'Technology Enhanced Learning consultations' were provided to schools through UCD Teaching and Learning who also offered follow-up training and developed Technology Enhanced Learning 'Quick Guides'.

UCD also delivered the fourth year of 'EdTeCx talks' a one-day event in March and 'EdTeCx in action' a week of workshops in August. EdTeCx provides an accessible institutional platform for faculty and staff to showcase their innovative approaches and share experience in implementing educational technologies in teaching and assessment practice. The theme for this year's events was 'Realities of Digital Learning'.

The Educational Technology Advisory Network (ETAN) was a new initiative established this year and will provide a forum for education

**// The Educational Technology Advisory Network (ETAN) was a new initiative established this year and will provide a forum for education technologists to share practice from across the University //**

technologists to share practice from across the University and input into policy development.

### University Teaching and Learning – Recognition and Professional Development

The number of faculty taking certified and continuing professional development programmes has continued to increase with over 100 participants during 2017/18 which is indicative of faculty commitment to teaching and learning excellence. Seminars and symposia have also been well attended. They directly addressed the needs of faculty and are linked to the priority areas of the Education Strategy – Our Students' Education and Experience 2015-2020.

### University Teaching and Learning Awards

Following the continued success of the now annual awards, the Teaching and Learning Awards 2018 were launched. Two award schemes will recognise the value and impact of teaching excellence and outstanding contributions to student learning made by UCD faculty and staff. Refinements to the awards include extending the nominations period through both semesters and the summer



UCD Access Leaders at the Access Symposium 2018.

period. 2,362 nominations of faculty and staff were submitted, a 40% increase on the last iteration. Over 90% of nominations were submitted by students; the remainder were submitted by faculty and staff. Awardees will be recognised at college level and at university level after application and adjudication processes in late 2018.

### **Fellowships in Teaching and Academic Development**

Established in 2007, the Fellowships in Teaching and Academic Development are part of UCD's institutional development structure to encourage a greater number of faculty to focus on advancing university-wide enhancement in teaching and learning. To date four cohorts of fellows have been appointed, comprising of 25 members of faculty drawn from 16 different schools. This year a review of the Fellowship Scheme was conducted by an independent researcher. The findings were published and informed the next round of Fellowships 2018–2020 which will focus on the themes: 'Teaching and Learning Across Cultures' and 'Designing for Learning in the VLE'. The new fellows will be recruited via competition at the end of 2018.

### **Professional Development in University Teaching and Learning**

The numbers of UCD faculty taking Professional Programmes in University Teaching and Learning is increasing. This year there were 60 graduates; 27 from the two-year Professional Diploma, 18 from the one-year Professional Certificate and 15 from the Certificate of Continuing Professional Development. The programmes are delivered in-house by UCD Teaching and Learning and provide academics at various stages of their careers with opportunities to review and improve their teaching skills and their understanding of approaches and theories in effective higher education. Modules studied include: 'Becoming a Better University Teacher', 'Problem-based Learning', 'Assessing for Teaching and Learning', 'Active Learning with Technology' and 'Getting Published in Teaching'.

A pilot programme for newly appointed assistant professors in the College of Social Sciences and Law and the College of Science was put in place this year. The programme is sponsored by the respective college principals and aims to provide a programme of supports enabling assistant professors to develop into their role. The programme includes opportunities for mentoring within schools/colleges, along with a range of development activities, covering three core areas of the Faculty Development Framework (Teaching and Learning; Research, Scholarship and Innovation; Leadership and Contribution).

There has been increased engagement in UCD's early-career professional development provisions. A new lecturer induction takes place in both semesters, complemented by an informal Teaching and Learning Community lunchtime session for new lecturers in semester one. The tutor induction training which runs in September and January continues to be popular with 169 attendees across both events in 2017/18. UCD Teaching and Learning also provides a dedicated seminar series for postdoctoral and research fellows to introduce participants to the key concepts underpinning good practice in third-level teaching and learning, and to enable them to review and prepare to undertake some basic teaching activities. Places continually fill up and capacity has doubled from last year.

## **Supporting Academic Enhancement**

### **Developing and Managing Quality**

In 2017/18, reviews were completed for the following: UCD School of Languages, Cultures and Linguistics, UCD School of Economics, UCD School of Social Policy, Social Work and Social Justice, UCD School of Archaeology, UCD School of Earth Sciences, UCD School of Biomolecular and Biomedical Science, UCD School of Chemical and Bioprocess Engineering, and the National Institute of Business Management, Sri Lanka (collaborative partner).

UCD values the contribution that external stakeholders provide to the maintenance of academic standards and the ongoing enhancement of UCD's activities. Some of these engagements occur annually, while others are cyclical. One example of a rolling cyclical quality process is the external accreditation of over 330 of UCD's academic programmes by Professional, Statutory and Regulatory Bodies (PSRBs), such as Engineers Ireland. Benefits of PSRB accreditation includes: the enhancement of the student learning experience by linking theory and practice, where knowledge-generation within the University directly interacts with professional practice in the real-world; the creation of pathways for graduates seeking to access the labour market for a particular profession; and the embedding of the ongoing quality assurance and enhancement of activity, as evaluated by PSRBs, which have extensive expertise in the relevant areas.

In 2019, the effectiveness of UCD's quality assurance processes will be subject to an external quality review sponsored by QQI. Preparations began in May 2018 to develop the Institutional Self-evaluation Report which will shape the dialogue between the review team and a cross section of UCD faculty, staff and students.

### **Delivering Library, Information and Knowledge Management Services**

Improving the student experience through provision of optimal learning environments is a priority. In the James Joyce Library the transformation of Level 1 to a social learning space continued with the development of Library Hub 2. This newly refurbished space provides access to reading list materials while also providing comfortable and flexible furnishings to accommodate social learning experiences. The space was made available by relocating the Collections unit to Level 2, where another large group study area has been constructed. Other facilities improvements were made in the Veterinary and Richview Libraries.

This year the Collections Curation Project was launched, which has as its goal the overall improvement of the quality of Library collections

**// The programmes are delivered in-house by UCD Teaching and Learning and provide academics at various stages of their careers with opportunities to review and improve their teaching skills //**

and their effectiveness in supporting teaching and research needs. Support for Reading Lists also expanded to cover the needs of 1,239 modules, a nearly 20% increase from the previous year.

Our cultural heritage units play a role locally, nationally and internationally in the promulgation of Irish cultural heritage. The National Folklore Collection was awarded a continuation of funding from the Department of Culture, Heritage and the Gaeltacht to support the digitisation of its core holdings, made available through collaboration with Dublin City University as the Dúchas project ([www.duchas.ie](http://www.duchas.ie)).

This year UCD Mathematics Support facilitated some 6,000 visits, supporting 1,500 students registered across all UCD colleges. The UCD Writing Centre which serves all undergraduate and postgraduate students provided 1,696 individual writing sessions as well as 69 workshops. Based in the Library, these and other library student support services ensure a synergy among the array of support services available to students, all of which are closely tied to student success, retention, and inclusion of diverse populations. Library learning opportunities were extended to the community as well, as the James Joyce Library opened its doors to 575 Leaving Certificate students following the spring examination period.

Other highlights this year include:

- The UCD Library and UCD Research implementation of a new Research Information Management System (<https://people.ucd.ie>) which is interoperable with the Library's newly upgraded Open Access Research Repository;

- Student orientation September 2018: training to 273 peer mentors, tours for 2,638 entering students, and 'Pop-Up Library' and 'Welcome Garden' stands to engage with new students;
- Outreach to students included participation in GradsConnect fair and the UCD International café and fair;
- 121 Digital sessions were offered during each term, where student volunteers taught digital skills to older people in the local community, including retired UCD staff;
- The UCD Irish Poetry Reading Archive continued to expand with the number of recorded readings now approaching 500; the recordings have been used at UCD and internationally by educators, researchers and publishers, registering more than 48,000 views on YouTube alone;
- The Irish Social Science Data Archive (ISSDA), which is managed by UCD Library, earned 'trusted digital repository' certification from the authoritative CoreTrustSeal assessment programme;
- A new 'StackMap' application was developed by the UCD Library that identifies the exact location of materials found through the Library online catalogue; now already being referred to as 'Google Maps for Books'.
- The Digital Library added more than 600,000 digital images to its repository, including the Éamon de Valera Papers: British Documents Relating to 1916.

### Information Technology

As part of our ongoing focus on improvement of the wireless service for faculty, staff and students, 300 legacy wireless access points have been replaced with higher performance equipment, increasing coverage capacity across campus. In addition, campus network switches have been upgraded to further increase resilience.

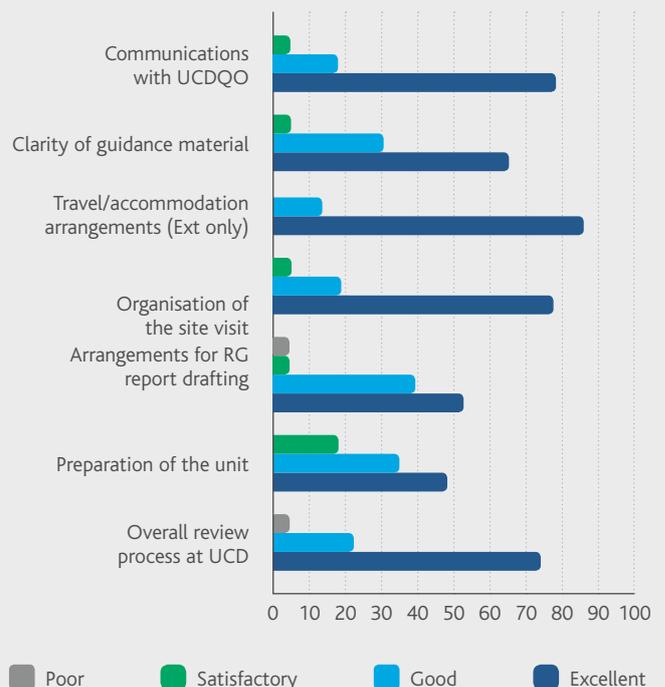
### Feedback on Quality Review Processes 2016/17

UCD regularly seeks both formal and informal feedback from members of review groups about its quality review processes and procedures. This survey is undertaken to evaluate the effectiveness of the process and to update, refine and continuously improve the University's procedures for quality review. Undertaking such evaluations is also consistent with the requirements and expectations of external higher education quality assurance guidance, such as the ESG and the QQI Core Statutory Quality Assurance Guidelines.

A short survey was sent to all reviewers, both internal and external to UCD, who had participated in quality reviews completed during the 2016-2017 period. A total of 23 surveys were circulated, from which there were a full 23 responses.

Figure 1 sets out responses on all of the key areas on which feedback was sought. Overall reviewer feedback was positive, with over 96% of all respondents indicating that the review process at UCD was excellent or good. Feedback on travel arrangements and accommodation was only sought from external reviewers, and 89% of respondents reported their experiences as 'excellent', with the remainder reporting a 'good' experience.

Figure 1: Feedback from Reviewers for UCD Quality Reviews 2016–2017





Pictured at a Return of NiteLine, event are (l-r): Dominic O’Keeffe, Director of Student Services and Facilities; Eoghan Mac Domhnaill, SU Welfare Officer; and Cillian Crosson (NiteLine).

In 2017/18 we also introduced a world leading Research Information Management System – Symplectic Elements. After the process of migrating data and integrating existing business systems concluded, the new system was successfully launched and data was made available through UCD Infohub and the Discovery public portal.

## Student Engagement and Life Skills

### Celebrating 25 Years of Excellence in Student Activities

In October 2017, UCD celebrated 25 years of the UCD President’s Award through the launch of a testimonial booklet featuring past recipients. Since the inception of the awards in 1993, a total of 278 recipients have been honoured with a President’s Award for their contribution to student life on campus. At the launch former award recipients and UCD alumni, Gavan Reilly and Sinéad Ingoldsby, reflected on the impact and importance of university activities outside of the classroom on their own personal development and career. Many other award recipients were captains and chairpersons, social activists and campaigners, administrators and representatives, all of whom continue to be influential, successful and active by making a difference to society, nationally and globally.

### Developing Careers

Career development and life skills are important to the success of our students’ educational experience, their engagement and progression as well as their future career and personal development. Some of the key milestones achieved during the year included:

- Delivering credit bearing career and professional development to students;
- Creating opportunities for internship and graduate recruitment through recruitment fairs such as the science, engineering and technology and business, finance and management events that were attended by 192 graduate employers and 4,438 UCD students;

- Engaging 89 employers in delivering employability skills workshops and presentations to 1,693 students;
- Collaborating with academic colleagues to deliver 158 stand-alone workshops in Schools and Colleges to 6,026 students;
- Facilitating students’ career decision-making and professional development with 2,792 students engaging in careers advisory and coaching interventions.

The UCD Career Development Centre also enhanced co-curricular offerings; 110 students completed a programme of alumni mentoring, 83 students achieved the UCD Embark and UCD Advantage Awards in their first year, 13 staff/student projects received funding under the Supporting Partnership and Realising Change (SPARC) initiative and 117 students achieved a non-credit bearing Certificate in Skills for Working Life or in Work-Based Learning.

### Mobile App and New Virtual Learning Environment

A new UCD Mobile App was launched with a greatly improved user interface and enhanced content, including access to the Virtual Learning Environment, library search functionality, information on student supports and the ability to book access to campus facilities including the UCD Cinema. Additionally, detailed analysis and consultation led to the implementation of a new next-generation virtual learning environment.

### Enhancing our Response to Students

This year support for the University’s student complaint, appeal and conduct processes was brought together under one team. The new team’s primary activities are student case management and the provision of advice and guidance to students, faculty and staff on appeals, complaints, student conduct, and capacity to study procedures. Creating this structure has enabled the sharing of knowledge and expertise, and process efficiencies and improved data capture can be used to identify trends, issues and opportunities for future enhancement. The team also developed an outreach and training programme to help raise awareness and promote

understanding of processes, improve access to services and better equip staff in key roles to engage effectively with student appeals, complaints and student conduct processes.

### International Student Advising Conference

UCD hosted the sixth annual conference of NACADA, the global community for academic advising based at Kansas State University. The four-day conference was the first hosted in Ireland and attracted over 300 participants representing 16 countries. The organising team involved collaboration between UCD Student Advisers, UCD Access and Lifelong Learning (ALL), UCD Library, UCD Career Development Centre and IT Blanchardstown. Staff from across UCD, including Student Advisers and ALL, presented papers and hosted workshops at the conference where topics included student academic support, student retention, supporting under-represented students in higher education, using peer supports and first-year student seminars.

### Community Engagement

UCD Student Advisers have been involved in several initiatives aimed at encouraging community engagement and a sense of belonging. UCD Purl Jam is a craft/creative community established by two Student Advisers in September 2017. The initiative brought faculty, staff and students together and produced multiple items for donation to charity. Other key projects included collaboration with the HSE to bring their 'little things' mental health campaign to UCD, a PhD club to provide a space for students who may feel isolated to come together, and a walk and talk to encourage people to connect and benefit from nature. These initiatives have encouraged faculty/staff/student interaction and enhance outreach with the broader community outside of UCD.

### Ad Astra

The inaugural Ad Astra Academy Graduation Evening for the class of 2017 took place on 12 October 2017 in O'Reilly Hall. It celebrated our Academic Scholars, Elite Sports Scholars and Performing Arts Scholars and featured UCD Alumnus, Patrick Boland (BComm) as the Ad Astra Guest Speaker. He spoke about his journey during and after his time in UCD.

The 2017 graduates celebrated on the evening included Paul O'Donovan, who whilst a scholar of the Academy won silver at the 2016 Rio Olympics and won and retained Gold at the World Rowing championships for two years in a row; Josh van der Flier, represented Ireland at the Six Nations Rugby and during the Guinness Series, and won man of the match against Australia; Deirdre Duke, was one of seven past and present Elite Sports Scholars that were part of the Irish Hockey Team that achieved silver at the Woman's Hockey World Cup last August. Academic Scholar, Allan Meiriño won a scholarship to read the MPhil in Classical Archaeology at the University of Oxford and several of our academic scholars were pursuing further studies in the world's top ten universities.

The event is pivotal in both signalling the end of the scholars' time with the Academy and recognising the importance of their time and ties to UCD. It builds the cohort of Ad Astra alumni who will be recognised for excellence in their chosen fields, who have demonstrably benefitted from their experience of the Ad Astra programme at UCD, who will become loyal advocates for the University and the Ad Astra Academy and who bring their expertise and resources to bear in benefitting future generations of UCD students.



Pictured at the International NACADA Conference at UCD 2018 are (l-r): Professor Jason Last (UCD Dean of Students); Dr Debbie Mercer, (Dean of the College of Education, Kansas State University); Professor Andrew Deeks (UCD President); Dr Colleen Doyle (UCD Student Adviser); Amy Sannes (NACADA) and Dr Charlie Nutt (NACADA Executive Director).



The 2017 Elite Sports Graduates with Ad Astra Academy Staff: (l-r) Adam Byrne (Rugby), Chloe Ryan (Golf), Ciara Grant (Soccer), Colin Judge (Para Table Tennis), Darina O'Hanlon (Ad Astra Academy Manager), Daniel Leavy (Rugby), Ann O'Hanlon (Elite Sports Manager), Joshua van der Flier (Rugby), Prof Colin Boreham (Elite Sports Strand Director), Prof Barbara Dooley (Ad Astra Academy Director), Maxim Kouogun (Soccer) and Edward Byrne (Rugby).

The Ad Astra Academy Awards Ceremony took place on 30 January 2018. A prestigious occasion where the new scholars are formally awarded their scholarships, and attended by their families, secondary school principals with the Stage 1 scholars, along with donors of the Academy and UCD faculty and staff. This year the Performing Arts strand performed the celebrated trio *Soave sia il vento*, from *Così Fan Tutte*, the Italian-language opera, as part of the evening performance.

## The Wider University Experience

### The Return of Niteline

During 2017/18, UCD Student Services collaborated with UCD Students' Union to establish a return of Niteline's late night listening and information service for UCD students. This is an out of hours support service that offers both online chat messaging and phone assistance, complementing our existing University supports including student advisers, counselling and health professionals and chaplains.

### International Student Affairs Summit

In June 2018, UCD Student Services hosted NASPA delegates for an educational and interactive summit experience to gain and share insights among peers. NASPA (Student Affairs Administrators in Higher Education) are the leading association for the advancement, health, and sustainability of worldwide student affairs. Their work provides high-quality professional development, advocacy, and research for 15,000 members in over 26 countries. Delegates received tailored tours and in-depth presentations on UCD structures, processes and student experience methodology.

### UCD Chaplaincy takes to the European Stage

From 4-8 June 2018, UCD hosted the Conference of European University Chaplains (CEUC) and welcomed 85 chaplains to UCD from 15 countries. This is the first time the conference was held in Ireland and was organised by a sub-group of the Irish Chaplaincy Network at Third Level (CN3), chaired by our chaplain.

### Cultural Exchange

Students from UCD's Universitas 21 partner, the University of Johannesburg were among the 60 participants at Tionól Gaeilge 2018, Bord na Gaeilge's Irish language summer school. This was the second year of this international summer school which is aimed at adults from Ireland and abroad. The students cited the uniqueness of the Irish language and their love of exploring different cultures as some of their main reasons for applying to study in UCD. The University of Johannesburg students who were selected to travel, were the highest achievers in each of their respective faculties – it was not only their first time in Ireland but their first taste of Europe. Students took classes in the Irish language and attended lectures on various aspects of its history and culture. South Africa is a multicultural country with many official languages and for some students, Irish was their eighth language! We are delighted that the students enjoyed their time here at UCD and hope they share their U21 experience to encourage more cultural exchanges.

### Society Activities

Student Societies are an integral part of student life at UCD, with more than 100 societies encompassing everything from juggling to debating. For the academic year 2017/18, UCD Societies recorded their largest ever total membership, with a combined membership of 55,000 students. The society with the largest membership was the

Law Society with almost 5,700 students, and 12 societies in total exceeded 1,000 members each. The total unique membership figure is just above 16,000 students. UCD Societies welcomed many guests to the University this year including American activist, Reverend Al Sharpton; President of the European Council, Donald Tusk; Actor, Patrick J Adams; Pop band, The Script; Comedian, John Bishop; Journalist, Nigella Lawson and Martial Artist and Coach, John Kavanagh.

### Sporting Achievements

The UCD Athletic Union Council Sport Awards, in association with Bank of Ireland, saw over 350 students from 24 different sports clubs honoured for their sporting achievements on behalf of the University over the past twelve months.

UCD Ladies Hockey had a phenomenal year both on the domestic and international stage. At home, the club retained the Women’s Irish Senior Cup title, their fourth in seven years, with an excellent win over Pegasus at Belfield. They sealed their second successive Irish Hockey League title in style, giving them their 13th overall victory in the competition whilst completing a IHL and Irish Senior Cup double. On the international stage, under the captainship of UCD Graduate Sports Scholar Katie Mullan, nine current and former UCD students took home a historic silver medal from the Women’s Hockey World Cup this August.

In February this year, our UCD Men’s Soccer team reached the Collingwood Cup Final, hosted by Queens University, Belfast. Drama has become synonymous with the final in recent years and the 2018 edition was no different. Despite playing the second half with ten men, UCD Ad Astra scholar and the competition Player of the Tournament, Daire O’Connor netted a wonderful 93rd minute winner for UCD to win their 47th Collingwood title.

The long 40-year wait was finally over for the UCD Marian Basketball Club this year as they were crowned Men’s Super League Champions at the National Basketball Arena in Tallaght with a 72-71 point thrilling win over Pyrobel Killester.

UCD Senior Men’s Gaelic Footballers claimed their second Sigerson Cup title in three years after claiming a hard fought win over NUIG at the Trinity Sportsgrounds.

Ireland took gold and silver at the World Under-23 Rowing Championships in Poznan, Poland. The Ireland lightweight pair of UCD Ad Astra Elite Sports scholars, David O’Malley and Shane Mulvaney, showed tremendous self-belief finishing two seconds ahead of Greece to take the gold. Ireland and indeed UCD went on to enjoy further success as the lightweight quadruple of Miles Taylor, Niall Beggan, Ryan Ballantine and UCD’s Elite Sports Scholar Andrew Goff, produced a turn of speed to take silver in the lightweight men’s quadruple sculls.

### Educating and Developing Graduate Research Students

In 2017/18 graduate taught enrolments grew by nearly 7%. Approximately 50% of all taught masters enrolments in Ireland are for study at UCD, demonstrating that UCD is the university of choice

for masters programmes. Overall graduate enrolments account for over 30% of total enrolments in UCD.

### Building Reputation

UCD continues to be recognised as a leader in doctoral supervision and education. In April 2018, UCD led the U21 working group on supports for research supervisors which met in University of Queensland in Brisbane. In addition, UCD in collaboration with colleagues in the Tarragona Think Tank on research supervision, published Good Practices in Doctoral Education. UCD has also begun preparations to host the annual meeting of ORPHEUS (Organisation of PhD Education in Biomedicine and Health Sciences in the European System) in March 2019.

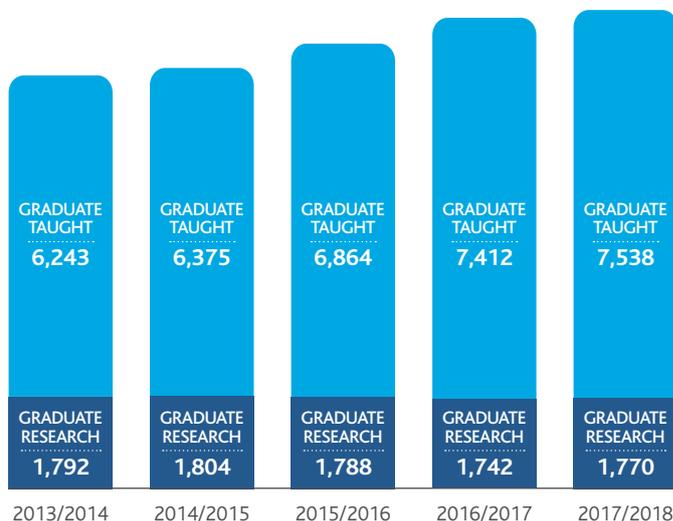
We are delighted that this year the UCD Dean of Graduate Studies was appointed to the European Universities Association – Council for Doctoral Education (EUA-CDE) Steering Committee. The EUA-CDE makes an important contribution to the development of doctoral education and research training in Europe. Its aim is to strengthen the doctoral research capacity of European universities, promote collaboration and exchange of good practices among its members and disseminate the outcomes of its work.

### Promoting Quality

We continually work toward an integrated quality assurance culture where student, supervisor and support staff are fully informed of, and engage with, quality enhancement procedures. As part of embedding a quality culture this year UCD participated in the ISSE PGR working group to develop a graduate research student specific engagement survey. The work of the group was showcased at the Quality in Postgraduate Research Conference in Adelaide in April 2018. UCD Graduate Studies and our Graduate Schools together secured a response rate in UCD of 39.2% compared to the national average of 32.5%.

This year UCD was also directly involved in the design and implementation of the National Forum for Research Integrity initiative, which aims to ensure that all researchers in Research Performing Organisations in Ireland successfully complete an online training module on Research Integrity resulting in certification.

### UCD Graduate Numbers





Pictured at an event in August 2018 are (l-r): Ashling Hartevelde (Summer School Administrator, Bord na Gaeilge UCD); Clár Ní Bhuachalla (Summer School Manager, Bord na Gaeilge UCD); Aisling Ní Sheirin (Summer School Tutor, Bord na Gaeilge UCD) with students from University of Johannesburg.

UCD continues to develop the supports it provides research supervisors. This year in addition to the Research Supervisor Support and Development Programme (RSSDP), which is open to all supervisors, the programme collaboration with TCD was extended to include RCSI. This development came as a response from faculty and institutions requesting specialist workshops in areas such as pedagogy of supervision and supervising multidisciplinary teams in biomedical areas. The lunchtime seminar series was expanded to include topics such as 'Giving Effective Feedback' and 'Top Tips from award-winning supervisors'. International speakers were also invited to host workshops on leadership in research and conflict management.

### UCD Thesis-in-Three

In May 2018, UCD held the inaugural Thesis-in-Three Research Communication competition. The competition which challenges PhD students to explain their research to a general audience in 3 minutes, using only one slide, received over 40 submissions representing all Colleges, with six finalists shortlisted to present their PhD work. The winner, Roshaida Abdul Wahab, based in the UCD Institute of Food and Health will represent UCD in the U21 Three Minute Thesis competition in October 2018.

Built into the competition was an opportunity for finalists to receive specialist training in public speaking and research communication. The judges for the competition included communication experts, who were external to UCD.

## Increasing Agility and Effectiveness

Our Agile objectives are delivering excellence, building 'continuous improvement' capabilities, and empowering faculty and staff to make UCD a better place. Agile also has a role in building insight and learning and leveraging strengths and opportunities in the pursuit of agility and effectiveness. Training is key to this, and this year 250 faculty and staff took part in our various half day, full day and six-day accredited training programmes. Participants on the full day training typically bring, whether individually or as a team, issues from their home office which they want to address through the training. Eleven staff took part in the accredited training, delivering significant projects in their home Schools/Units. These included: laboratory/workshop management (UCD School of Agriculture and Food Science and UCD School of Mechanical and Materials Engineering); process

enhancement (UCD Registry, Research, IT Services, and Finance Office); analytic/service (UCD IT Services and HR); contact centre development (UCD Estate Services); and service and enhancement (UCD Finance and UCD Registry).

While delivering training remains a key mechanism for engaging with colleagues from across the campus, Agile brings its influence and support into other significant projects. The key example in 2017/18 being a Student and Academic Services Review, which aims to enhance how we deliver our academic programme supports to students and faculty. Agile's annual reflection process, a key part of its role on behalf of UCD, has helped set the Agile Agenda into 2019, bringing a sharper focus on catalysing a more systematic engagement with the goals and opportunities of Strategic Initiative Six, enabling Lean operations, and measuring the impact of this initiative.

Work Smarter Together communities of practice (CoP) continue to expand. In the last year an Agile CoP began, focused on the techniques and skills we provide training in. Agile is supporting the new School Manager CoP as well as working with existing CoPs. Communities of Practice in UCD are about building and sharing skills and knowledge. Work Smarter Together events were held in October and February, with a summer school in July. These provided opportunities for input from UCD colleagues as well as from outside the University, for sharing and for connecting.

# Research, Innovation and Impact

## Introduction from Vice-President for Research, Innovation and Impact

The past year has seen continuing strong performance by UCD in research, innovation and impact, with successes in major funded programmes as well as in individual scholarship.

It was our most successful year ever for research grants, with external awards totalling €122.4 million. This represents an increase of more than 25% on last year, and an increase of €5.5 million on our previous peak.

The number of publications from UCD in the Scopus database in 2017 was 3,410, up 14% since 2014, and the field-weighted citation impact of those publications was 78% above world average, up from 67% above world average in 2014. This demonstrates that the University is delivering on Objective 1 of the UCD Strategy 2015-2020: to increase the quality, quantity and impact of our research, scholarship and innovation.

Among the major research grants registered this year were two Science Foundation Ireland Research Centres led by UCD: the BEACON Bioeconomy Research Centre and the I-FORM Advanced Manufacturing Research Centre. Industry funding included a major artificial intelligence research project with Samsung Electronics. Professor Murray Hitzman joined UCD as Director of the iCIRAG SFI Research Centre, and received an SFI Professorship Award. UCD researchers secured two Advanced Grants and three Consolidator Grants from the European Research Council. One of the Advanced Grant recipients, Professor Ken Wolfe, became the first researcher nationally to achieve a second of these highly prestigious awards. UCD is also a central partner in AgriChemWhey, Ireland's largest ever award under the EU Horizon 2020 programme. UCD researchers won a number of major awards, among them Professor John Walsh, who won the Royal Irish Academy Gold Medal in the Environmental Sciences and Geosciences.

Building our capacity to deliver impact from research continues to be an area of focus. We were awarded the Knowledge Transfer

**Research Publications:** details of all research publications for the period of the Report are available online at [www.ucd.ie/research/publications](http://www.ucd.ie/research/publications).



Ireland 2018 Collaborative Research Impact Award for our research collaboration with ENBIO, an Irish space company. UCD spin-out company OxyMem was SME category winner at the US-Ireland Research Innovation Awards 2018, jointly presented by the American Chamber of Commerce Ireland and the Royal Irish Academy, and Dr Andrew Hines of UCD School of Computer Science and the CONNECT SFI Research Centre won the higher education category award at the same event. Building on this track record of success in innovation, work has begun on a major expansion of NovaUCD, the Centre for New Ventures and Entrepreneurs, and we also opened Ireland's first in-hospital Knowledge Transfer offices at St Vincent's University Hospital and the Mater Misericordiae University Hospital.

We continue to grow our work on public engagement, to ensure that our research is influenced by and shared with the public for mutual learning. Dr Aoibhinn Ní Shúilleabháin, UCD School of Mathematics and Statistics won the 2017 SFI award for outstanding contribution to STEM communication. In clinical and translational research we have expanded the extremely successful Patient Voice events, which seek to ensure that our research into major diseases is informed by the experience of those with lived experience of these diseases.

As ever, our success in research, innovation and impact is reliant on the outstanding skill and commitment from our faculty, researchers and research support staff. I would like to convey my thanks to them all.

A handwritten signature in black ink, appearing to be 'Orla Feely'.

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

## Research Funding

Externally funded research contracts registered during the year amounted to €122.4 million (see Table 1). Table 2 shows the largest research grants awarded this year. The value of externally funded research awards increased this year by 25.5%. Most of the main

funding sources such as Science Foundation Ireland (SFI), the Irish Research Council (IRC) and Enterprise Ireland (EI) have shown increases. EU funding also increased, and has now demonstrated growth over each of the last two years. This source continues to be prioritised, and the €19.15 million secured in 2017-18 represents a 12% increase year on year.

Table 1: Research Awards

	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18
Total value contracts signed including contributions to overheads (€ million)	49.5	103.3	75.7	113.3	114.1	106.3	93.7	97.5	122.4
Total contributions to overheads (€ million)	6.7	17.0	9.5	17.4	16.5	17.2	13.2	12.3	17.3
Total number of contracts awarded	449	510	532	614	672	627	652	661	706
Number of proposals submitted	1,069	1,123	1,263	1,167	1,245	1,603	1,372	1,336	1,411

Funding source 2017/18	Number of contracts	Value (€ million)
Science Foundation Ireland (SFI)	90	46.22
European Commission (EC)	34	19.15
Irish Research Council (IRC)	108	13.56
Enterprise Ireland (EI)	121	7.45
Department of Agriculture, Food & the Marine	20	5.76
Others	333	30.24
<b>Total</b>	<b>706</b>	<b>122.4</b>

Pictured at the 'Entrepreneurship – Exploring the opportunities for women to initiate and lead businesses' panel discussion, organised by NovaUCD and the UCD Quinn School of Business as part of the 2018 UCD Festival are; Alison Cowzer, East Coast Bakehouse; Keira Kennedy, KDK; Nicola Byrne, Cloud90 and Louella Morton, TestReach.



Two SFI Research Centre awards were funded in 2017-2018. The BEACON bioeconomy research centre led by Professor Kevin O'Connor received €15.02 million and the I-Form advanced manufacturing research centre led by Professor Denis Dowling received €15.7 million, inclusive of indirect costs.

This year we increased our IRC award funding to €13.56 million. This was largely driven by the successful and very welcome IRC Laureate Awards Programme that provided for investigator-led awards in all disciplines.

**Table 2: Largest Grants Awarded to UCD 2017/18**

Leader	Funding source	Programme	Title	Total €M
Professor Kevin O'Connor	Science Foundation Ireland (SFI)	Research Centres - Full Proposal	Bioeconomy Research Centre (BEACON)	11.03
Professor Denis Dowling	Science Foundation Ireland (SFI)	Research Centres - Full Proposal	I-Form Advanced Manufacturing Research Centre	10.12
Professor Murray Hitzman	Science Foundation Ireland (SFI)	Research Professorship	Innovative Geological Research to Improve Mineral Resource Discovery and Sustainable Development	5.93
Professor Barry Smyth	Samsung Electronics Co Ltd	Research Project	Deep Recommendation	2.59
Professor Kenneth Wolfe	HORIZON 2020	ES - ERC Advanced Grant	Killer plasmids as drivers of genetic code changes during yeast evolution (CODEKILLER)	2.37
Assoc Professor Barry Molloy	HORIZON 2020	ES - ERC Consolidator Grant	The Fall of 1200BC: The role of migration and conflict in social crises at end of the Bronze Age in South-eastern Europe (THE FALL)	2.00
Professor Susi Geiger	HORIZON 2020	ES - ERC Consolidator Grant	Misfires and Market Innovation: Toward a Collaborative Turn in Organising Markets (MISFIRES)	1.92
Dr Pat Gibbons	HORIZON 2020	ES - Marie Skłodowska-Curie Research and Innovation Staff Exchanges (RISE)	Building Resilience through Education (BRTE)	1.89
Assoc Professor Dragos Calma	HORIZON 2020	ES - ERC Consolidator Grant	NeoplAT: Neoplatonism and Abrahamic Traditions. A Comparative Analysis of the Middle East, Byzantium and the Latin West (9th-16th Centuries) Primary ERC Review Panel* SH5	1.86
Professor Andrew Keane	Science Foundation Ireland (SFI)	Investigator Programme	Active Distribution System Management Enabled by Distributed Power Electronics	1.34
Professor Neil O'Connell	HORIZON 2020	ES - ERC Advanced Grant	Integrable Random Structures (IntRanSt)	1.29
Professor Robert Shorten	Science Foundation Ireland (SFI)	Investigator Programme	Scalable, Privacy-Enhanced Analytics for the Sharing Economy	1.25
Professor Kenneth A Dawson	Science Foundation Ireland (SFI)	International Partnership Programme SFI-NSFC Partnership	Precision Engineering of Nanostructure Surface Architecture for Biological and Biomedical Applications	1.24
Professor Anding Zhu	Science Foundation Ireland (SFI)	International Partnership Programme SFI-NSFC Partnership	ADAPMW: High Efficiency Adaptive Millimetre Wave Transceivers for High Speed Wireless Communications with Unmanned Aerial Vehicles	1.09

## UCD Seed Funding

A total of 350 eligible applications were received for the 2018 Seed Funding Scheme, in line with the number received in previous years. There were 145 successful applications (41%) resulting in almost €500K in funding being awarded. The Scheme continues to support the development of research activity to meet the overall aims of the University's research strategy. More detail is available in Table 3.

## UCD Output Based Research Support Scheme (OBRSS)

Research activity is critical to UCD's reputation as a leading global university. We recognise that commitment to excellent research builds UCD's reputation and that many of the day-to-day costs of research activity are not covered by research grants. In response, UCD has developed the Output Based Research Support Scheme (OBRSS) to disburse research support funds to faculty based on their research outputs, as captured through publications and PhD supervision. During the past year, 759 faculty were awarded support funds through OBRSS. Full details of the OBRSS are shown in Table 4.

## Publication Metrics

In 2017, there were 3,410 papers listed in Elsevier SciVal for UCD (see Table 5). Although the coverage in this data does not reflect the totality of UCD's publications (which was 5,850 for the year), this is an important metric. On aggregate, UCD has produced the highest volume of academic publications in the country over the past ten years.

## Field-Weighted Citation Impact

Field-weighted citation impact compares the actual number of citations received by an article with the expected number of citations for articles 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 74% more cited than the world average, putting UCD on a similar plane with many other leading international research intensive universities. During the past five years, 21% of UCD's publications were in the top 10% of the

Table 3: UCD Seed Funding Scheme

2018 Seed Funding by Programme	Volume of Applications	Value of Applications €	Volume of Awards	Value of Awards €
Career Development Award	74	916,101	21	156,440
Dissemination and Outputs	171	321,250	94	127,431
Equality, Diversity and Inclusion Strand A	7	56,313	2	9,866
Equality, Diversity and Inclusion Strand B	6	16,330	2	2,537
Horizon Scanning	83	1,045,298	21	175,468
Visiting Professors – Incoming and Outgoing	9	73,253	5	27,459
<b>Total</b>	<b>350</b>	<b>2,428,545</b>	<b>145</b>	<b>499,201</b>

2018 Seed Funding by College	Volume of Applications	Value of Applications €	Volume of Awards	Value of Awards €
UCD College of Arts and Humanities	26	134,539	8	18,379
UCD College of Business	5	45,782	3	17,764
UCD College of Engineering and Architecture	64	395,297	24	59,885
UCD College of Health and Agricultural Sciences	84	708,324	36	166,754
UCD College of Science	102	718,834	42	163,493
UCD College of Social Sciences and Law	69	425,769	32	72,925
<b>Total</b>	<b>350</b>	<b>2,428,545</b>	<b>145</b>	<b>499,201</b>

**Table 4: Output Based Research Support Scheme**

College	Volume of Awards	Value of Awards €
UCD College of Arts and Humanities	88	48,652
UCD College of Business	50	27,553
UCD College of Engineering and Architecture	85	114,944
UCD College of Health and Agricultural Sciences	205	218,706
UCD College of Science	171	171,785
UCD College of Social Sciences and Law	160	125,281
<b>Total</b>	<b>759</b>	<b>706,921</b>

most cited worldwide. In addition, 56% of the publications were co-authored with institutions in other countries, emphasising UCD’s position as a global university.

## New Research Management System

The University has launched a new Research Management System, Symplectic Elements, to help researchers capture, collate and showcase their research profiles. Elements is an internationally acclaimed system, used by more than 300,000 researchers at over 80 of the world’s top universities including the University of Oxford, Cambridge, MIT, Princeton University and Imperial College London. To date over 1,200 UCD academic and research staff have published their profiles using Elements at <https://people.ucd.ie/>. The new system is a vitally important tool that helps us to recognise and promote the full range of research and innovation activity in which our researchers are involved, including publications, impact and contributions to society.

## UCD Strategic Research Priority Areas – Key Highlights

In UCD we seek to deliver excellent research in areas in which the University and country can lead globally, working closely with a range of strategic partners. In order to do this we have identified six priority themes:

1. **Agri-Food**
2. **Culture, Economy and Society**
3. **Energy and Manufacturing**
4. **Environment**
5. **Health**
6. **ICT**

### Agri-Food

The agri-food sector is at the forefront of our response to some of the most pressing global challenges and is Ireland’s largest indigenous

**Table 5: Publication Metrics and Field-Weighted Citation Impact**

Publication Year	Number of Publications in SciVal	Publication Year (5-years)	Field-Weighted Citation Impact (5-years)
2013	3,022	2009-13	1.65
2014	3,011	2010-14	1.67
2015	3,066	2011-15	1.69
2016	3,298	2012-16	1.69
2017	3,410	2013-17	1.74

Source: Elsevier Scopus/SciVal (accessed September 28, 2018)

industry. UCD is working with the sector to ensure sustainability and global competitiveness, and to develop safe, novel foods and promote human health. Through our expertise in animal science and veterinary medicine, we promote efficient, sustainable, healthy and welfare-friendly livestock production. Our graduates are leaders in the agri-food sector nationally and internationally.

### Agri-Food Highlights

UCD has continued to be a thought leader in this sector, engaging industry, academics and policy-makers on the future of agriculture and food. UCD held a seminar on Agri-Food, Food Security and Nutrition - Framing the Priorities for FP9, hosted in the European Parliament by Brian Hayes MEP, with European policy-makers and stakeholders to frame agri-food research priorities in advance of FP9 (now called Horizon Europe).

UCD is a partner in a new collaborative biorefinery research project being led by Glanbia Ireland. The Bio-Based Industries Joint Undertaking (BBI JU), under the European Union’s Horizon 2020 research and innovation programme, awarded €22 million to the AgriChemWhey project which represents the largest H2020 win in Ireland. The project is exploring how to convert by-products from the dairy industry to high-value bio-based products including biodegradable plastics. The new technology developed by Glanbia Ireland will provide the dairy industry and wider society with an opportunity for greater resource efficiency. Professor Kevin O’Connor, UCD School of Biomolecular and Biomedical Science and Director of the Beacon SFI Research Centre, is playing a major role in shaping the future of the bioeconomy, in Ireland and across Europe, in his role as chairman of the Science Advisory Board for the BBI JU. Professor Nick Holden, UCD School of Biosystems and Food Engineering is also a leading investigator in the project.

Professor Alex Evans, Dean of Agriculture and Head of the UCD School of Agriculture and Food Science, Professor Dolores O’Riordan, Director of the UCD Institute of Food and Health and UCD Vice-President for Global Engagement, Professor Mark Keane, UCD Chair of Computer Science, and Triona McCormack, UCD Director of

Research, addressed a hearing of the Oireachtas Joint Committee on Agriculture, Food and the Marine on the topics of smarter food production and the future of young farmers. They described how the future of farming and food is changing, and how UCD is working with others to deliver on opportunities in the emerging bioeconomy, the use of ICT in agriculture, and the future of food and nutrition.

Researchers in the UCD Lyons Dairy Research and Education Facility were awarded funding by the Department of Agriculture, Food and Marine and the Department of Agriculture, Environment and Rural Affairs, Northern Ireland to investigate the interaction between genotype and nutrition in high yielding dairy cows in seasonal grass-based systems of milk production. The main objectives of the NutriGen project are to identify key drivers of feed efficiency and energy balance in high-yielding dairy cows and the evaluation of the impact of various nutritional strategies and genetic traits on dairy cow performance in a seasonal grass-based system of milk production. The major institutions involved in this project are UCD, Teagasc and the Agri-Food and Biosciences Institute (AFBI).

Dr Barbara Murphy, UCD School of Agriculture and Food Science and founder of Equilume, was shortlisted for the 2017 Women Mean Business Awards. Dedicated to highlighting the work of both Irish and international businesswomen and female entrepreneurs, the annual awards honour some of Ireland's most inspiring female business leaders and role models. Equilume is a world leader in the research and development of light therapy solutions to assist the global horse industry to maximise reproductive efficiency and competitive performance.

Professor Simon More, UCD School of Veterinary Medicine, was elected Chair of the Scientific Committee of the European Food

Safety Authority (EFSA) for 2018-2021. EFSA is an agency of the European Union providing independent scientific advice on current and emerging risks associated with the food chain.

Ten researchers from the UCD School of Agriculture and Food Science and four from the UCD School of Veterinary Medicine secured funding of over €3 million under the Department of Agriculture, Food and the Marine's Food Institutional Research Measure (FIRM) and Competitive Forestry Research for Development (CoFoRD) funding programmes.

Zoetis Inc is funding the UCD2 Transatlantic One Health Alliance between the UCD and University of California, Davis (UC Davis) Schools of Veterinary Medicine. This alliance will advance the health of animals, people and the environment in a unique transatlantic manner by promoting innovative research collaborations to address global societal needs.

### Culture, Economy and Society

UCD is renowned for our research and impact in the areas of arts, humanities, business, social sciences and law. UCD researchers continue to lead in the scholarship of Ireland and its global environment: interpreting the past, critically interrogating the present and imagining the future. They inform public policy and public debate, and deliver and support landmark cultural contributions. Through its provision of critical expertise and of talented graduates, and working with our strong network, UCD supports a strong and sustainable economy and helps make Ireland a more attractive place to live.

### Culture Economy and Society Highlights

Three UCD researchers have been awarded highly prestigious European Research Council (ERC) Consolidator Grants of circa €2 million each



Professor Michelle Norris, UCD School of Social Policy, Social Work and Social Justice, was announced overall winner of UCD's inaugural research impact case study competition in October 2017. Professor Norris' research and teaching interests focus on social housing policy and urban regeneration.



The Science Apprentice book series advisory group. The Science Apprentice book series encourages children and adults of all ages to explore the science, technology, engineering and mathematics of the world around us. The collection of four books is being distributed nationwide with the Irish Independent in Super Valu stores, libraries and schools. The project was created by UCD Research and is supported by the Science Foundation Ireland Discover Programme, the Environmental Protection Agency, and the Irish Independent.

to pursue ground-breaking research in archaeology, philosophy and business. Dr Barry Molloy, UCD School of Archaeology, has received his funding for a study entitled 'The Fall of 1200 BC'. Dr Dragos Calma, UCD School of Philosophy has received his funding for a study entitled 'Neoplatonism and Abrahamic Traditions: A Comparative Analysis of the Middle East, Byzantium and the Latin West (9th-16th Centuries)'. Professor Susi Geiger, UCD College of Business, has received her funding for a study entitled 'Misfires and Market Innovation'.

The Museum of Literature Ireland (MoLI) is a major collaboration between UCD and the National Library of Ireland aimed at creating a new landmark cultural institution in the heart of Dublin in the original home of the University, Newman House. MoLI will celebrate Ireland's literary culture and heritage.

In recognition of its world significance and outstanding universal value to culture, the Irish Folklore Commission Collection 1935-1970 at UCD has been inscribed into the UNESCO Memory of the World Register. The Register has a total of 427 collections and documents from around the world on materials including stone, celluloid, parchment and sound recordings.

Professor Robert Gerwarth, UCD School of History has won the 2018 Premio Nazionale 'Cherasco storia' for the Italian edition of his latest book *The Vanquished: Why the First World War Failed to End* (La rabbia dei vinti, Laterza, 2017). This is Italy's premier award for historical non-fiction.

Professor Bryan Fanning, UCD School of Social Policy, Social Work and Social Justice, launched his new book entitled *Migration and the Making of Ireland* at a joint event at the Irish Embassy in London with UCD Press.

Dr Emilie Pine launched the interdisciplinary Industrial Memories project. This two-year research project analysed the findings of the 2009 Report of the Commission to Inquire into Child Abuse (the Ryan Report), funded by the Irish Research Council under New Horizons 2015. The project has two main strands, data analytics and digital arts.

Associate Professor Lynda Mulvin was elected Fellow of the Society of Antiquaries of London. The Society was founded in 1707 and its Fellows include many distinguished international archaeologists, art and architectural historians.

The research and leadership from Professor David Farrell, UCD School of Politics and International Relations has been instrumental in establishing and supporting Ireland's Citizen Assembly. Significantly, the 2018 referendum on the Eighth Amendment of the Constitution is a culmination of the work involved in this new deliberative process.

The work of Dr Niamh Howlin, UCD School of Law on the trial of Myles Joyce in November 1882 resulted in a pardoning in respect of the Maamtransa Murders.

A new and significant passage tomb dating back some 5,500 years has been discovered beside Dowth Hall in Co Meath. The excavation was carried out by Devenish in partnership with the UCD School of Archaeology. To date, two burial chambers have been discovered within the western part of the main passage tomb, over which a large stone cairn (c.40m diameter) was raised.

There was funding success in the area of anti-money-laundering with Enterprise Ireland funding awards for two UCD School of Business

## // The Museum of Literature Ireland (MoLI) is a major collaboration between UCD and the National Library of Ireland aimed at creating a new landmark cultural institution in the heart of Dublin //

researchers, Dr Sha Liu with Accenture and Professor Cal Muckley with Fidelity Investment. Dr James Sweeney, UCD School of Business won an Enterprise Ireland award in collaboration with Zurich Life Assurance for a project on Geospatial Customer Clustering and Segmentation.

An SFI-funded project entitled A Mixed-Methods Examination of Reviewer Recruitment, Assessment Criteria, and Workflow in the Peer Review Process was led by Professor Kalpana Shankar, UCD School of Information and Communication Studies and the UCD Geary Institute for Public Policy, with Associate Professor Diane Payne and Dr Pablo Lucas, both UCD School of Sociology.

Professor Mike O'Neill and Dr David Fagan, both UCD School of Business, won an SFI award for their project on sports analytics injury prevention with StatSports and LERO.

### Energy and Manufacturing

At UCD we are working to find solutions to the energy challenges of the 21st century. Our research expertise covers the traditional energy sources of oil and gas, as well as the integration of renewable energy and the interface between energy and ICT in areas such as Smart Grids and Smart Cities. We analyse the economics and the behavioural science around energy choices, we seek to enable the policy framework to promote efficient and sustainable energy use, and we drive the emergence of new energy enterprises. We partner extensively with energy companies in our research, and many leaders of the sector nationally and internationally are UCD graduates. Advanced manufacturing is an area in which UCD is further developing its research capability and leadership. Manufacturing competitiveness has been identified by the National Research Prioritisation Steering Group as a key area of focus, and the UCD College of Engineering and Architecture is aligning its strategy to address challenges in this field.

### Energy Highlights

The UCD Energy Institute, in its delivery of world-class research, is positioned well to support the transition to low-carbon energy. The breadth of activity is captured by three major initiatives: the Research Programme of which the SFI Partnership Programme ESIPP is the flagship project; a modelling system for evidence-based low-carbon policy known as EMPowER; and a demonstration facility in the form of an Integrated Energy Laboratory (IE Lab). All three initiatives reflect our core areas of expertise – Energy Systems, Energy Economics and Policy, and Energy Management. By fostering both internal and external collaborations and acting as a focal point within UCD for energy-related research, the UCD Energy Institute facilitates the integration of interdisciplinary research to provide a truly holistic approach.

UCD Energy Institute continues to expand its programmes in the EU. It is now a key participant in a series of EU-funded programmes, including SPINE (creating a toolbox for modelling integrated energy system), EU-SysFlex (developing new types of services that will meet the needs of the system with more than 50% of renewable energy sources), NewTREND (energy efficiency retrofit), MIGRATE (power electronic devices), Sim4Blocks (simulation supported energy management) and RE-SERVE (maintaining grid stability with increased inputs from renewable sources). SFI recently awarded Professor Andrew Keane and Associate Professor Terence O'Donnell, both UCD School of Electrical and Electronic Engineering, €1.3 million for a project entitled ADEPT, looking at active Distribution System Management enabled by Distributed Power Electronics.

### Manufacturing Highlights

The UCD-led SFI I-Form Advanced Manufacturing Research Centre is now fully established, conducting cutting-edge research into the application of digital technologies in manufacturing. Headquartered at UCD, the academic consortium includes DCU, TCD, NUIG, IT Sligo, Waterford IT and NUI Maynooth. The centre has a particular focus on additive manufacturing (3D printing) and is working with industry partners in sectors such as aerospace and medical devices, to develop solutions that will widen the application of this exciting technology.

Advanced manufacturing research at UCD is also gaining significant international profile with the work of the group under Professor Fengzhou Fang, UCD School of Mechanical and Materials Engineering. A world-renowned expert in micro/nano manufacturing research and innovation, Professor Fang is ramping up his cutting edge research programme with an investment of €5 million under the SFI Research Professorship Programme coupled with support from other partners.

### Environment

Many of the most significant global challenges relate to our ability to sustain our environment and to use natural resources wisely. UCD researchers deliver practical solutions in the areas of sustainable living, natural resources, climate change, natural hazards and the built environment. Their expertise spans a broad range of disciplines, including the biological and physical sciences as well as economics, behaviour and regulation, and they address the challenges facing Ireland's unique environment along with the major global questions.

### Environment Highlights

World leading economic geologist, Professor Murray Hitzman was appointed as SFI Research Professor at UCD and as the new director of the SFI Research Centre iCRAG. Professor Hitzman led the largest economic geology research group in the United States at the Colorado School of Mines, and has a proven record as an ore-finder and mine developer across Europe, North and South America, Australia/Oceania and South America. He will lead a new €4.7 million research programme at UCD School of Earth Sciences which will employ 16 researchers over five years, and is focused on studying the geology, geochemistry and geophysical signature of mineral deposits in the Irish zinc-lead orefield and other mineral systems across Europe and Africa. iCRAG's research focuses on the discovery, de-risking and sourcing of raw materials, water and energy resources that are critical to the global economy. As Director, Professor Hitzman will oversee the SFI Research Centre's programme across seven different institutions and 150 researchers to deliver scientific and economic impact for Ireland.

BEACON, the SFI Bioeconomy Research Centre, led by UCD, and HARVEST (Helping Agriculture Remain Vital through Engineering, Science and Technology), a National Science Foundation funded Research Co-ordination Network based at Virginia Tech, have developed an international bioeconomy research agreement to support rural and farming communities in Ireland and the USA. The agreement will see both BEACON and HARVEST sharing knowledge and expertise with the objective of developing vibrant sustainable communities that benefit from using both disruptive and established technologies.

Acclimatize is a €6.7 million climate change research initiative aimed at improving the quality of coastal waters in Ireland and Wales to boost tourism and support marine industries. The five-year programme is led by UCD in partnership with Aberystwyth University, part-funded by the European Regional Development Fund through the Ireland Wales Programme 2014-2020. The project will identify pollution streams and their impact on coastal waters, and the impact of climate change on pollution. Furthermore, it aims to develop a range of practical management methods, including smart real-time predictive tools, to improve the quality of coastal waters to ensure compliance with regulations to protect human health and the marine environment.

Other projects in environmental research include System for bathing Water quality Modelling (SWIM) which involves Professor Gregory O'Hare, UCD School of Computer Science, Professor Wim Meijer, UCD School of Biomolecular and Biomedical Science and Dr John O'Sullivan, UCD School of Civil Engineering. An award of €644K from the Science Foundation Ireland Science Policy Research Programme went to Professor Dieter Kogler, UCD School of Architecture, Planning and Environmental Policy for a project titled Science Technology Space (SciTechSpace).

Professor Patricia Maguire was appointed Director of the UCD Institute for Discovery in September 2017. The goal of the institute is to strengthen the interdisciplinary research environment at UCD, in order to address Irish and global challenges.

### Health

At UCD, we are looking to the future of healthcare, one where new therapies, technologies and devices emerge from the symbiosis of technology and biology. Our precision medicine approach offers great promise in better targeting therapy and reducing side effects across a range of specialties, including cancer, metabolic and cardiovascular disease and dermatology. OneHealth, a priority area for UCD, focuses on infectious and rare diseases and considers animal as well as human health. Access to the largest academic hospital network in the country, the Ireland East Hospital Group (IEHG), serving a patient population of over 1.1 million, provides unique opportunities for translation and implementation. We are also leaders in health promotion, informing policy and practice, and our connected health programme works with clinicians, industry and patients to change the way healthcare is delivered.

### Health Highlights

Professor Kenneth Wolfe, UCD School of Medicine and UCD Conway Institute was awarded a European Research Council Advanced Grant for the second time in his career. He is the first ever Ireland-based researcher to receive two of the highly sought after research funding awards that support transformative, high-risk research projects at the frontiers of science and scholarship. They are part of the EU's Research and Innovation programme, Horizon 2020. He will receive €2.37 million to examine the evolution of genetic code and the changes it underwent in several species of yeast.

An award of €600K from the IRC Laureate Programme was made to Professor Emma Teeling, UCD School of Biology and Environmental Science for AGE IMMUNE: The evolution and molecular basis of exceptional ageing and immunity in mammals.

Professor Kenneth Wolfe, UCD School of Medicine and UCD Conway Institute is the first ever Ireland-based researcher to be awarded a prestigious European Research Council Advanced Grant twice in his career.



Irish life-sciences company, Genomics Medicine Ireland Ltd has partnered with the UCD Institute for Sport and Health to launch Ireland's first large-scale research study into the role of genetics on fitness and health, called GenoFit. The study will combine advanced scientific technology in genomics, the study of all of a person's genes, together with detailed lifestyle information to provide a comprehensive view of the potential genetic factors contributing to fitness and health. A new clinic has been established in UCD Institute for Sport and Health to conduct the study, which will be overseen by Professor Giuseppe De Vito, UCD School of Public Health, Physiotherapy and Sports Science and Dean of Performance Science, and Professor Colin Boreham, Director, UCD Institute for Sport and Health.

UCD, Genomics Medicine Ireland Ltd and St Vincent's University Hospital are collaborating in a nationwide study to examine the genomic basis of chronic respiratory conditions, such as asthma, and Asthma-COPD Overlap (ACO). The study is the first of its kind in the world, and aims to identify and examine the underlying genetic factors that are common amongst people living with asthma and ACO. The objective of the study is to identify commonalities and linkages that can help predict disease severity, better understand complex subtypes, and help develop more personalised treatment pathways for patients to manage their respiratory conditions – with the hope of one day finding a cure.

UCD is partnering in the Eastern Corridor Medical Engineering Centre (ECME), a cross-border centre of research excellence within the field of cardiovascular medicine. The centre has received €8.2 million in funding from the European Union's INTERREG VA Programme, managed by the Special EU Programmes Body (SEUPB). ECME is a partnership between Ulster University, which is leading the Centre, and UCD, DCU, Dundalk Institute of Technology, Southern Health and Social Care Trust Cardiac Research Unit and the University of Highlands and Islands. Cardiovascular disease causes 26% of all deaths in the UK and in the Republic of Ireland this figure is slightly higher at around 30%. ECME will see researchers from academia and industry collaborate with partners in the health and social care system to create better models of heart disease care and develop new medical grade wearables and remote monitoring systems to improve clinical outcomes and patient experience.

The UCD Perinatal Research Centre based at the National Maternity Hospital, Holles Street, Dublin was established this year. The aim of the Centre, within the UCD School of Medicine, is to co-ordinate national and international collaborative research in maternal and fetal health, including diabetes and nutrition in pregnancy, to improve the long-term health of mothers and their infants. Professor Fionnuala McAuliffe, UCD School of Medicine, is the director of the new centre. Professor McAuliffe is an internationally recognised expert in pregnancy, maternal and fetal health, diabetes and nutrition in pregnancy. Among the research studies being carried out at the centre is the Pregnancy Exercise and Nutrition Study with Smartphone Application Support (PEARS), which involves over 500 women.

## ICT

ICT research at UCD advances knowledge and delivers highly trained researchers in fields such as data analytics, artificial intelligence (AI), the Internet of Things, smart systems, privacy and security. It also

connects these fields with others, addressing applications such as smart agriculture, connected health and digital humanities.

## ICT Highlights

The areas of ICT and Data Science have had another strong year, with UCD continuing to provide leadership through its prominent roles in Insight, CeADAR, the UCD Centre for Business Analytics, and as a partner to CONNECT, ADAPT and MCCI.

This year saw two significant international conferences organised through UCD: the ECML-PKDD supported by Insight at Croke Park, and the International Conference on Complex Analysis, Potential Theory and Applications organised by UCD School of Mathematics and Statistics. ECML-PKDD is the leading European academic conference on machine learning and data mining, with a CORE Rank A rating.

Significant research funding success was also achieved from a mix of industry, national and international funders. Awards within UCD School of Computer Science include a new €4 million artificial intelligence research project through Insight with Samsung Electronics Co Ltd. This collaborative research project will leverage deep data science and AI expertise at the Insight Centre, including machine learning, user modelling, and recommender systems, to enable Samsung create smarter products and more personalised experiences tailored for its customers and users. The three-year research project will be led by Professor Barry Smyth, Dr Aonghus Lawlor and Associate Professor Neil Hurley, of UCD School of Computer Science.

UCD's partnership with IBM continues to bear fruit, with Professor John Murphy, UCD School of Computer Science, recently awarded an IBM Murphy Award. The focus of this award will be the advancement of cognitive-edge computing to enable smart campus applications.

A selection of the successful funding awards from the UCD School of Electrical and Electronic Engineering include a €1.3 million award from SFI to Professor Robert Shorten to carry out research on Scalable, Privacy-enhanced Analytics for the Sharing Economy. Professor Anding Zhu received an SFI-NSFC Partnership award for €1.1 million to carry out research on Millimetre Wave Transceivers for High Speed Wireless Communications with Unmanned Aerial Vehicles. Professor Peter Kennedy was awarded €876K for research into Advanced Frequency Synthesis. Dr Nam Tran was awarded a prestigious Career Development Award from SFI valued at €536K, and Professor Mark Flanagan was awarded an IRC Laureate Award valued at €574K to carry out research into MIMO Communications.

## UCD Research Institutes

In addition to contributing across the priority research areas as outlined above, the UCD research institutes delivered a number of significant cross-cutting events across the University, some of which are outlined below.

### UCD Conway Institute

The Patient Voice in Health Research initiative has expanded considerably in the past year and now involves researchers working

in the disease focused research areas of cancer, diabetes, arthritis and rheumatic conditions. Through public and patient involvement (PPI) in health research, we can better shape the research agenda, improve the quality of our research, its relevance to society and positively impact on patient outcomes. The Institute is building a cohesive brand for this initiative that will position UCD as an emerging leader in the arena. A training programme for faculty and staff was piloted which established a shared learning network in conjunction with the PPI Ignite team.

### **UCD Institute for Discovery**

In September 2017, Associate Professor Patricia Maguire, UCD School of Biomolecular and Biomedical Science, was appointed as director seeking to strengthen the impactful interdisciplinary research environment at UCD and aid our vibrant research community to address relevant Irish and global challenges. In the intervening period, the Institute has worked to engage in and deliver activities in order to catalyse and cultivate interdisciplinary research.

Opportunities for early-stage researcher ideation have been facilitated by providing mentorship, development and funding workshops. The Institute was proud to invite to UCD several eminent visiting professors including Professor Margaret Boden OBE and Professor Maja Pantic, to deliver public engagement seminars, which were well received both internally and externally. The UCD Institute for Discovery has recently completed refurbishment of a non-traditional space in the UCD Science Centre Hub building where researchers from across the University can connect.

### **UCD Earth Institute**

The UCD Earth Institute is actively promoting multidisciplinary environmental research and was recently awarded a €1.47 million Belmont-Biodiversa grant on ecosystem services involving UCD researchers with expertise in geography, environmental policy, English, biology and engineering and with international partners in Europe and North America.

### **UCD Energy Institute**

UCD Energy Institute continues to grow its strategic partnerships and is pleased that EPRI, the global leader in the development of key technologies in the electrical industry, is an anchor tenant in the development and growth of the Integrated Energy Lab in UCD.

### **UCD Institute of Food and Health**

The UCD Institute of Food and Health held an event on The Global Food Regulatory Landscape: Beyond Brexit. Leading experts including Professor Michael Boland, Minnesota State University, Dr Pat O'Mahony, Food Safety Authority of Ireland and Bryan Barry, Deputy Director of the Irish Farmers' Association shared their thoughts on the challenges and opportunities arising for Food Regulation following Brexit. The Institute also hosted the Internet of Things 4 Food conference. This conference, organised by Professor Nick Holden, UCD School of Biosystems and Food Engineering, was a result of continuing collaborations with the University of California, Davis in the area of food. The event focused on the interconnection of computing devices embedded in everyday objects associated with food, which will transform food systems, food chains and business models for food and tech companies.

### **UCD Geary Institute**

A team at the UCD Geary Institute for Public Policy has been appointed as National Co-ordinator for Round 9 of the European Social Survey in Ireland following a national competition. The survey is an academically driven cross-national survey that measures the attitudes, beliefs and behaviour patterns of diverse populations in more than thirty nations. Project fieldwork for Ireland will commence in autumn 2018.

In early 2018, the Institute acquired the domain publicpolicy.ie and is developing it as a resource of evidence-based policy for professionals and academic researchers and an arena for wider public debate and engagement on the main policy issues in Ireland. The platform will showcase the impact of UCD research on policymaking and is expected to go live in 2018.

Highlights of the new programme on behavioural science included a new AIB-UCD lab for research into consumer decision-making. The lab, which is funded by AIB, will explore the development of new ideas in the financial decision-making domain and the team will conduct research projects on consumer financial decision-making.

### **UCD Humanities Institute**

The UCD Humanities Institute has had a productive year, with a full house of doctoral, postdoctoral and visiting scholars and many research and training events. A new strategic partnership and Erasmus+ agreement was put in place on Transnational and Transcultural Studies with the Institute for Modern Languages Research at the School of Advanced Study, University of London. The Institute's annual Distinguished Guest Lecture, The Future of Sovereignty, was given in March this year by the esteemed Professor Arjun Appadurai, Goddard Professor in Media, Culture and Communication, New York University.

The Institute has been the driving force behind two high profile public engagement series in collaboration with the UCD Discovery Institute and the UCD Geary Institute for Public Policy. The first was 'Plotting the Future', which explored the social, economic and cultural impact of Artificial Intelligence and Robotics. The second was entitled 'Truth to be Told' which engaged with the notion of truth in a post-factual and hyper-mediated age.

## **Innovation**

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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. We support this commitment through our innovative and entrepreneurial students and graduates, the development of partnerships with businesses, Government agencies and social and cultural enterprises, the commercialisation of research outputs, generating, supporting and scaling new ventures and creating jobs.

An example of this commitment is the University's €6.5 million investment to develop and extend the east courtyard at NovaUCD to increase capacity to support innovative start-up companies. NovaUCD currently has 1,425m<sup>2</sup> of licensable space in a total of 40 units, labs and co-working space. The newly developed courtyard will



Pictured (l-r) at the launch of Ireland's First Hospital Knowledge Transfer Offices at St. Vincent's University Hospital and The Mater are; Gordon Dunne, Chief Executive, The Mater Misericordiae University Hospital; Professor Michael Keane, Acting CEO, St Vincent's University Hospital; Dr Ena Walsh, Life Sciences Case Manager, Technology Transfer, UCD and Tom Flanagan, Director of Enterprise and Commercialisation, UCD.

result in 800m<sup>2</sup> of additional licensable space, or over 50% increase in capacity, and will include a total of 23 business units, labs and co-working space.

### **In-Hospital Knowledge Transfer Offices**

UCD is fully committed to engaging in an increasingly broad range of activities that will allow stakeholders, such as industry, public sector and not-for-profit organisations, to benefit from the wealth of technology, research, innovation and expertise that the University generates. In this regard one of the key new initiatives introduced during the year was the opening of Ireland's first in-hospital Knowledge Transfer Offices in partnership with St Vincent's Healthcare Group (SVHG) and The Mater Misericordiae University Hospital (MMUH).

The future of healthcare in Ireland is being shaped through research and innovation and both SVHG and the MMUH have strong track records in the delivery of high quality research that provides meaningful impact to their patients.

The in-hospital Knowledge Transfer Offices were opened by UCD to develop the commercial potential of the research outputs emerging from both hospitals and to extend the reach of their medical advancements to a greater number of patients worldwide. These offices will protect the resulting intellectual property, assess its commercial potential, and where appropriate licence this IP to life science companies or create new start-up companies to bring the innovations to market.

A total of six clinics have to date been held in the hospitals resulting in a number of potential ideas being discussed with consultants, clinical nurses and clinical trial co-ordinators.

### **Other New Initiatives**

In addition to the in-hospital KTOs a number of other new initiatives were introduced during the year including the NovaUCD Mentor Panel, KT Scouts, NovaUCD Internship Programme and a collaborative initiative with the UCD Michael Smurfit Graduate Business School.

The aim of the NovaUCD Mentor Panel is to assemble a panel of experienced business leaders who will preview and enhance commercial propositions and inventions being developed or disclosed by UCD research teams and to mentor these teams. The mentors may potentially invest or take the lead as CEO, if appropriate, to bring these opportunities to market.

The aim of the KT Scout Initiative is to foster and build a community of selected postdoctoral fellows, PhD students and research administrators who are interested in learning more about the commercialisation of technology. The scouts will learn more by assisting the UCD Technology Transfer Office in identifying new commercial opportunities within their own Colleges, Schools and Institutes. The initiative currently has scouts within the UCD Schools of Electrical and Electronic Engineering; Chemical and Bioprocess Engineering; Earth Sciences; Architecture, Planning and Environmental Policy; Agriculture and Food Science; and Mechanical and Materials Engineering.



Left: Pictured at NovaUCD are some of the KT Scouts; Dr Sarah Brady (UCD School of Mechanical and Materials Engineering), Dr Mary Doorly (UCD School of Electrical and Electronic Engineering), Dr Aleksandra Konic Ristic (UCD School of Agriculture and Food Science), Dr Srikumar Roy (UCD School of Earth Sciences) and Dr Laura Quinn (UCD School of Chemical and Bioprocess Engineering) with Dr Stephen Donoghue, Case Manager, Technology Transfer and Tom Flanagan, Director, Enterprise and Commercialisation (pictured centred).

NovaUCD and UCD Michael Smurfit Graduate Business School MBA students collaborated through the UCD MBA Entrepreneurs Club to match ambitious business students with research groups looking to develop and commercialise their research. VoxelDome, led by MBA graduate Thom Strimbu, supported by NovaUCD and leading UCD computer scientist researchers, is in the early stage of development. VoxelDome is building tools that video professionals need to create volumetric video for AR/VR.

The NovaUCD Business Internship programme ran for six weeks over the summer during which two international business students, Josie Brisuela, University of Illinois and Nhi Nguyen, Temple University worked for two early-stage UCD ventures. As part of the programme the interns conducted market analysis to understand the scope and size of the relevant target market; developed marketing collateral and a strategy to enable the ventures successfully pitch their innovations to potential customers. The results were excellent with both ventures significantly advancing their product market fit and generating several customer leads.

### ConsultUCD

ConsultUCD is the University's managed consultancy service. During the last year ConsultUCD has worked with academics from across UCD to support their external consultancy. Our academic consultants have worked with a variety of organisations including pharmaceutical companies, charities, Irish and UK SMEs, accountancy and legal firms.

ConsultUCD is actively engaging with industry and business to develop consultancy opportunities. Such opportunities will enable our expertise to deliver economic and societal benefit in Ireland and internationally by enabling the UCD's knowledge and expertise to be more widely and more easily accessible to external stakeholders. Academics who undertake consultancy are able to use the proceeds to fund their research and commercialisation activities.

## Partnering with Industry

UCD has a strong track record of working with industry and seeks strong and strategic engagement with business, 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 CSETs, Centres and Strategic

Research Clusters, and Enterprise Ireland-funded and industry-led technology centres.

In addition over 250 companies have funded research at UCD in recent years and more than 1,000 companies have also collaborated with UCD on research projects.

Over 50 companies, ranging from early-stage high-tech start-ups to established innovation-led companies, are now located at UCD. 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, the Centre for New Ventures and Entrepreneurs or NexusUCD, the Industry Partnership Centre, and have located on campus in order to collaborate more closely with UCD.

### Commercialisation of Research Outputs

NovaUCD provides purpose-built, state-of-the-art incubation facility for knowledge-intensive companies alongside a comprehensive business support programme.

During the year several international delegations, from countries including Australia, Chile, China, India and the USA visited NovaUCD to learn more about UCD's success in commercialisation and entrepreneurial activities.

Through UCD's technology 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.

Through ConsultUCD, based at NovaUCD, academic and the wider staff community who provide consultancy services to external clients are supported to ensure a high level of professionalism and commercial focus for clients.

The Enterprise Development and Innovation Education training team at NovaUCD also supports researchers in the commercialisation of IP outputs through a series of training programmes including the Innovation Sprint, Commercialisation Bootcamp and VentureLaunch Accelerator Programmes.

During the year researchers from UCD reported a total of 91 inventions. In addition 23 priority patent applications were filed by



Centre: Professor Brian Caulfield, UCD School of Public Health, Physiotherapy and Sports Science, recipient of the NovaUCD 2017 Innovation Award.

Right: The co-founders of Kogii (l-r): Andrea Pignanelli, Callan Eldon and Karl Roe, winners of the 2018 UCD Start-up Stars Programme for student entrepreneurs.

UCD across areas of engineering, information and communication technology, and life sciences. 23 licence agreements were also concluded by UCD with a range of indigenous and international companies. One of the agreements signed was with Irish biopharma company Amryt in relation to a novel gene therapy platform for the treatment of epidermolysis bullosa. In addition five new UCD spin-out companies were incorporated.

### UCD Commercialisation Programmes

During the year nine UCD research teams completed a one-day UCD Innovation Sprint programme focused on 5G. The aim of this programme, held at NovaUCD, was to help participants to understand how to create new ventures for 5G. The overall aim of the UCD Innovation Sprint programme is to encourage the development of commercial outputs arising from research taking place at UCD by engaging with researchers at an earlier stage in the commercialisation process.

During the year 70 researchers completed three UCD commercialisation bootcamps delivered at NovaUCD. Participants on the bootcamps represented a total of 45 potential commercial projects emerging from research taking place at UCD. The overall aim is to strengthen the pipeline of commercial opportunities arising from UCD and NCAD research programmes.

### UCD 2017 Start-Up Award

Prolego Scientific, an early-stage UCD School of Mathematics and Statistics start-up, was declared overall winner of the 2017 UCD VentureLaunch Accelerator Programme. This programme supports the creation and launch of sustainable and profitable new ventures based on intellectual property emerging from UCD research programmes.

Prolego Scientific offers proprietary artificial intelligence solutions that are used to improve the accuracy of genetic tests in many areas such as improving animal health and performance metrics. The founders of Prolego Scientific are Dr Belinda Hernández and Associate Professor Andrew Parnell, both UCD School of Mathematics and Statistics.

### NovaUCD 2017 Innovation Award

The 2017 NovaUCD Innovation Award was presented to Professor Brian Caulfield, UCD Dean of Physiotherapy by UCD President, Professor Andrew Deeks, at an event held at NovaUCD. The Award was presented in recognition of Professor Caulfield's successful commercialisation of research, undertaken at UCD School of Public Health, Physiotherapy and Sports Science.

Over the last 10 years the focus of Professor Caulfield's research programme has been on exploiting technological advances to enhance human performance, in the fields of connected health and sport, through wearable and mobile sensing measurement and intervention applications. These applications are now opening up new avenues for human performance evaluation and enhancement in areas from elite sport to rehabilitation medicine to gerontology.

Professor Caulfield's research in these areas has also led to significant commercial opportunities in terms of exploitation of IP by industry partners, including licensing and spin-out activity. He has also collaborated with a range of multinational and start-up companies including; BioMedical Research Ltd, Fujitsu Laboratories, GE, Intel, Novartis and Shimmer Research.

### UCD Startup Stars

During the year UCD Startup Stars, an entrepreneurial support programme, now in its fourth year, for UCD undergraduate and postgraduate students who want to work together to build start-ups, was run in collaboration by NovaUCD, the UCD Innovation Academy and the UCD Michael Smurfit Graduate Business School.

UCD Startup Stars began with a series of cross-disciplinary workshops and course modules delivered over a three-month period at UCD Michael Smurfit Graduate Business School and UCD Innovation Academy. Six early stage student ventures, with 17 team members, were selected to participate in an intensive mentoring programme, which took place over a four-week period at NovaUCD.

The aim of this programme was to assist the students in refining their start-up ideas and included a series of structured workshops from industry experts, interactive workshops, regular pitching sessions and mentoring.

Following final pitches to a panel of judges, Kogii was declared overall winner of this year's programme. Kogii, an early-stage start-up, is developing an innovative and feature-rich smart bike light to improve real-time safety for cyclists. Kogii also plans to use the data acquired from the light's sensors to help understand precisely what factors make a road dangerous for cyclists.

The members of the Kogii team are Karl Roe, Andrea Pignanelli and Callan Eldon. The sponsors of UCD Startup Stars programme are; AIB, Arthur Cox, Goodbody Stockbrokers and Xilinx.

### 2018 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 ninth year, the innovation and skills camp, held at NovaUCD, involved 30 second-level students from across Ireland who demonstrated an ability to understand how and why a simple idea can be developed into a commercially viable enterprise. The participating students were selected from all the secondary school students who competed in the 2018 BT Young Scientist and Technology Exhibition.

Four students from Kildare, Kerry, Limerick and Cork were declared overall winners of the Bootcamp for their project, which aims to improve global food security, and which was entitled 'Feeding the world by 2050; The effects of pseudomonas flourescens on barley crop yield.'

### Fundraising Success

During the year several UCD spin-out and spin-in companies were successful in raising funding and announcing new jobs.

ATXA Therapeutics Ltd, which is developing novel therapeutic drugs to treat pulmonary arterial hypertension (PAH) and other related cardiovascular conditions, secured €2.5 million in funding under the European Union's Horizon 2020 SME Instrument Programme Phase 2. Securing the Horizon 2020 SME Instrument Award will be a key accelerant in bringing NTP42, ATXA's lead drug for PAH, closer to the market by advancing the drug into clinical development. ATXA Therapeutics was founded by Professor Therese Kinsella as a spin-out from the UCD School of Biomolecular and Biomedical Science and the UCD Conway Institute.

Foundry Innovation & Research 1 Ltd (FIRE1), a connected medical device solutions company dedicated to improving outcomes for people suffering with chronic diseases, with offices at NexusUCD, closed a Series C financing totalling €40 million. The financing was led by new investor Glide Healthcare, with the participation of new investors Gimv and Seventure and existing investors including Lightstone Ventures, Medtronic and New Enterprise Associates. The financing provides FIRE1 with capital to further advance its novel remote monitoring solution to improve outcomes for heart failure patients.

Zeeko, an EdTech start-up headquartered at NovaUCD, has secured just over €100,000 in funding through the Horizon 2020 SME Innovation Associate Programme. The company is using the funding to launch a new research project, initially involving schoolchildren in Ireland, to evaluate the side effects of virtual reality technology on children's health.

### Other Successes

During the year UCD was awarded the Collaborative Research Impact Award at the 2018 Knowledge Transfer Ireland Awards for its research collaboration with ENBIO, the Irish space company, a graduate of NovaUCD.

Deep space travel poses many significant environmental challenges to spacecraft. To minimise the risk, protective outer coatings are required. ENBIO had worked with the European Space Agency to develop a black thermal control coating. When ESA asked the company for a white version, ENBIO contacted Professor Kenneth Stanton, UCD School of Mechanical and Materials Engineering for help. This was the start of a long-term collaborative research project leading to the development and commercial delivery, in 2017, of SolarWhite, a thermo-optical coating developed to reflect radiation and protect space-crafts. This collaboration has had a significant impact for the company as the resulting SolarWhite coating has



Wayne Byrne, a co-founder of the UCD spin-out company OxyMem, SME category winner at the US-Ireland Research Innovation Awards 2018.

## // During the year UCD was awarded the ‘Collaborative Research Impact Award’ at the 2018 Knowledge Transfer Ireland Awards for its research collaboration with ENBIO, the Irish space company //

now been rigorously tested for space-flight readiness, and is the only qualified white coating on the €1.7 billion Solar Orbiter mission.

OxyMem, a UCD wastewater spin-out, and a growing Irish cleantech company was named SME category winner at the US-Ireland Research Innovation Awards 2018, jointly presented by the American Chamber of Commerce Ireland and the Royal Irish Academy. OxyMem is a leading innovator in energy efficient wastewater treatment using Membrane Aerated Biofilm Reactor (MABR) technology. The treatment saves energy, reduces sludge and adds additional capacity to existing treatment plants in shorter timeframes than leading competitors. The company was co-founded by Wayne Byrne, Professor Eoin Casey and Dr Eoin Syron as a spin-out from the UCD School of Chemical and Bioprocess Engineering.

Kypha, a US medical diagnostics company, developing specialised biomarker testing solutions for precision monitoring of immune status and inflammation, has acquired Biosensia, to strengthen Kypha’s product portfolio. Biosensia, a diagnostics platform and contract development company headquartered at NovaUCD was established in 2009 and will continue to operate as a wholly owned subsidiary of Kypha.

O.C.E. Technology is to develop a new real-time operating system in collaboration with the European Space Agency. The €500K project is expected to take 18 months to complete. The new operating system, which will be developed to flight quality standards, will contain some unique features for the advanced control of satellite subsystems. The new operating system will allow deterministic scheduling of tasks and will use the new 16-bit SPARC REX instruction set to minimise its storage footprint.

OncoMark Ltd, a UCD diagnostics spin-out company, focused on the development of novel panels of cancer biomarkers to aid treatment decisions for cancer patients, has appointed Professor John Crown as the company’s chief medical officer. Professor Crown MD, MBA, a consultant medical oncologist at St Vincent’s University Hospital, Dublin, is an oncology thought leader who has published extensively in clinical and translational breast cancer research.

Testreach, headquartered at NexusUCD, won the 2018 Digital Disruptor Award, which was presented to the company at an Enterprise Ireland event at Deloitte Digital in London. The Digital Disruptor Award created by Enterprise Ireland aims to recognise Irish companies that are disrupting the marketplace in which they operate through technological innovation.

## UCD Innovation Academy

UCD Innovation Academy has continued to grow its engagement with the UCD students and faculty and with communities, locally and internationally. This includes:

- 292 undergraduate students who participated in modules Introduction to Creative Thinking and Entrepreneurial Endeavour;
- 145 graduates who were reskilled through the Postgraduate Certificate in Innovation, Entrepreneurship and Enterprise in collaboration with HEA Springboard+;
- 81 secondary schoolchildren from the Dublin area, with 75% of participants coming from DEIS Schools, participated in a Creativity, Innovation and Entrepreneurship summer programme partially funded by the Higher Education Authority;
- 237 PhD students who participated in modules in Creative Thinking, Social Entrepreneurship and Opportunity Generation and Recognition;
- 56 students from UCD College of Science and UCD College of Health and Agricultural Sciences who participated in an online module in Creative Thinking and Innovation;
- 108 professional educators, including 60 UCD faculty, who participated in the Professional Certificate and Diploma for Entrepreneurial Educators.

The UCD Innovation Academy continued to grow its engagement with industry and the new UCD Professional Diploma in Creativity, Innovation and Leadership, designed in collaboration with industry, was launched to develop future innovation leaders with 78 participants in partnership with the HEA Springboard+ initiative.

In addition 160 UCD undergraduate students tackled challenges relating to Blockchain, the Future of Audit and Corporate Social Responsibility as part of an Industry Immersion Day at Deloitte with Bank of Ireland.

The UCD Innovation Academy also successfully delivered the InnovationAcademy@ESB, a bespoke programme designed to develop the innovation capacity of selected staff across the ESB. Two UCD PhD candidates and a postdoctoral fellow were also selected to participate in this programme where participants worked collaboratively to prototype new initiatives for the company.

During the year the UCD Innovation Academy expanded its international presence with new programmes in Malaysia and Vietnam. These include the Entrepreneurial Educator Enhancement Programme (3EP) co-ordinated by the Ministry of Education in Malaysia and a series of multi-day workshops to enhance the teaching practice of 25 academic staff at Vietnam National University, Hanoi supported by Irish Aid, through the Vietnam Ireland Bilateral Education Exchange Programme.

With funding from the HEA Mobility Programme, UCD Innovation Academy and the Centre for the Initiation of Talent and Industrial Training at the University of Malaya, successfully piloted an entrepreneurial thinking module facilitated by UCD Innovation Academy for 200 undergraduate students. In addition Professor Suzi Jarvis was awarded an Adjunct Professorship by University of Malaya.



Left: Deputy Prime Minister of Thailand, Mr. Wissanu Krea-nga visits UCD. Right: Students having fun at the President's Welcome for International Students.

# Global Engagement

Launched in September 2016, the UCD Global Engagement Strategy has seen continued significant progress during the past year, including the opening of a new Global Centre in Dubai, bringing the total number of our centres supporting UCD's global engagement overseas to five.



**Dolores O'Riordan**  
Vice-President for  
Global Engagement

This year, our international student numbers increased further to 7,923, representing over a quarter of all students on UCD's Dublin campuses and bringing diversity to our community with students from close to 140 different countries. O'Reilly Hall was alive with excitement as new international students gathered at the start of term for a warm welcome from the President, faculty and staff. Throughout the year, we held a wide range of events to celebrate the cultural diversity of our UCD community. The ever-popular celebration of Diwali took place in November, with 270 students participating in the Festival of Light. In February, we celebrated Chinese New Year with a live streaming of the New Year celebrations from Beijing. For Muslim students, Iftar events took place in both Dublin and Dubai, bringing together faculty, staff and students to break fast during Ramadan. The UCD Festival in June also reflected UCD's place as Ireland's Global University with the return of the highly popular Taiko drumming workshops, and internationally themed activities and events that entertained visitors and staff alike.

Beyond Dublin, UCD enrolls a sizeable cohort of students in programmes taught overseas. As part of St Patrick's Day celebrations around the world, An Tánaiste Simon Coveney TD visited Beijing University of Technology (BJUT), home of Beijing-Dublin International College (BDIC), which is jointly operated by UCD and BJUT. In March, Penang Medical College, wholly owned by UCD

and RCSI, was granted Foreign University Branch Campus Status in Malaysia, becoming just the 10th institution to achieve this and the first in Ireland. This joint campus has now been renamed RCSI and UCD Malaysia Campus (RUMC).

In support of UCD's Global Engagement Strategy, the inaugural UCD Global Week for faculty and staff took place in June, featuring an array of speakers from across UCD, Ireland, and our global partners. The week demonstrated the value and strength of our global partnerships, and also highlighted UCD's important and valued place as a dominant player on the world stage in the university and business sectors.

With 2017 marking thirty years since the European Commission launched the Erasmus programme, the past year has also seen continued success for UCD in attracting Erasmus funding and in the student and staff mobility which flows from this. UCD has been a long-standing beneficiary of the Erasmus and Erasmus+ programmes, and received €919,405 in 2018 to fund 410 students and 15 staff for mobility projects within Europe in the 2018/19 year. In parallel, UCD was awarded €130,000 in Erasmus+ International Credit Mobility funding to support the mobility of 32 students, faculty and staff between Ireland and a range of countries (including Chile, Georgia, India, Indonesia, Kenya, Russia, Tunisia and the Ukraine) over the next 24 months.

It was another successful year for UCD Volunteers Overseas' Volunteering and Development education programme – 100 UCD students, faculty, staff and alumni volunteered in four countries (Uganda, Tanzania, India and Haiti) and worked with 13 partner organisations conducting community development, healthcare, education, and infrastructural development activities. UCDVO continued its partnerships with Irish Aid, Concern Worldwide, Trócaire and Comhlámh to deliver a high quality development education programme for the wider UCD community.

In line with the UCD vision: *'We will bring the best of the world to Ireland and the best of Ireland, including its distinct cultures, to the world'*, UCD held events throughout the year to engage with our alumni overseas. UCD President, Professor Andrew Deeks connected with alumni and diaspora on the west coast of the United States, which also afforded the opportunity to meet with Ireland's Permanent Representative to the United Nations, Geraldine Nason Byrne to discuss UCD's contribution to the UN's Sustainable Development Goals. A visit to the Middle East included a well-attended alumni reception and included meetings with higher education institutes and key government bodies.

The units comprising the Global Engagement Portfolio (UCD International, UCD Applied Language Centre, the Irish Institute for Chinese Studies and the UCD Confucius Institute) have each had a productive year.

Under the leadership of Dr Douglas Proctor, the team in **UCD International** has been actively supporting Schools and Colleges in international student recruitment, student mobility, student support, and building international partnerships. 'Rowan', UCD's Global Partnerships Database, continues to be developed to meet the needs of the UCD community and provide valuable data on the University's global engagement activities.

We have continued to build and deepen our global partnerships and networks. UCD joined the World Universities Network (WUN) in January and we have hosted high level government delegations, most notably welcoming senior officials from Singapore, Thailand and China. In September, we renewed our partnership with Study Group to run the UCD International Study Centre, an academic unit that offers International Foundation Year pathway programmes for international students. Now located on the UCD campus at Belfield, the UCD International Study Centre enrolled over 100 students this year from 17 countries.

With UCD's Global Centres operating in five countries and seven cities worldwide, UCD International operates in eight different time zones, and the scale and scope of activities this year have increased with the addition of the Middle East Global Centre in Dubai.

The **UCD Applied Language Centre** continued to grow and enhance its provision of language teaching, exam services, and pre-sessional pathways for international students. It also partnered with BDIC and Chang'an University in China to deliver English language modules within their degree programmes.

The 34th Confucius PhD Forum and the **UCD Confucius Institute in Ireland (CII)** Public Lecture Series took place in December. Professor Liming Wang, Director of the UCD CII delivered a public lecture on 'China's New Silk Road Initiative: Vision, Actions and Implications for Ireland', which explained the significance of the inspiration from the ancient Silk Road and the new Silk Road Initiative in creating a community of shared futures for mankind. UCD CII participated in the Spring Festival Fair in Dublin city centre in February to celebrate the Year of the Dog with local Irish and Chinese communities, which drew close to 10,000 visitors.

The **Irish Institute for Chinese Studies (IICS)** hosted a public lecture on international Chinese teaching in May 2018, with renowned scholar Prof Joël Bellassen, the President of European Association for Chinese Teaching as keynote speaker. At the event, IICS also launched its recently completed Teaching Pack for Junior Cycle Short Course in Chinese.



**Dolores O'Riordan**  
Vice-President for Global Engagement



Left: Students having Chinese New Year celebrations in Astra Hall. Right: A UCDVO Volunteer, part of a 4-week computer education project in Morogoro, Tanzania.



Left: Launch of the Gender Identity and Expression Policy Feb 2018 – Ari Shiel (Auditor of LGBTI Society), Prof Colin Scott, VP for EDI, Toni Walsh (Founder of the Irish Queer Archive), Katherine Zappone TD, Minister for Children and Youth Affairs, Paula McGarry (UCD), UCD President, Prof Andrew Deeks, Dr Lydia Foy. Right: UCD Community Choir.

# Equality, Diversity and Inclusion

UCD believes in equality, diversity and inclusion and embeds these fairness principles into all aspects of University life.



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

UCD's mottos, 'Ad Astra' and 'Cothrom Féinne', reflecting both excellence and fairness, remind our community that fair play is integral to our mission and informs our policy development, behaviours and decision-making so that the UCD community embraces equality, diversity and inclusion.

Our vision for EDI is to be a leader and role model in equality and diversity in the higher education sector nationally and internationally, and for EDI to be at the heart of all we do.

This statement of mission and vision was adopted by the University Management Team as part of the UCD Equality, Diversity and Inclusion policy in May 2018. This policy commits the University to the creation of an environment in which all members of the University community should expect to be able to thrive, be respected and have a real opportunity to participate in and contribute to University activities so that they can achieve their fullest potential. Socio-economic status

was included in the policy as a tenth equality ground, additional to the nine statutory equality grounds.

The following sections set out some more detail of policy changes, initiatives and events, and the key opportunities we are focusing on for the future. The progress which UCD is making to mainstream equality, diversity and inclusion throughout the University is a tribute to the many faculty, staff and students who contribute to developing policies and actions and to the commitment and creativity of colleagues in UCD Culture and Engagement, UCD Access and Lifelong Learning and the UCD EDI Unit. I wish to record my special thanks to these teams for their hard work during the year.

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

## Policy – Development and Embedding

The Equality, Diversity and Inclusion Strategy was developed during the past academic year. Widespread consultation around key EDI priorities took place with the University community (employees and students), involving lightning presentations by members of the community, an external keynote speaker and a workshop session. Workshops took place with specific leadership groups such as the Governing Authority and the Extended Leadership Group. This strategy will be finalised and launched in January 2019.

The Dignity and Respect policy was revised in 2017 to promote a positive culture of dignity and respect and to encourage early resolution of issues at a local level. This policy was embedded in the University over the past year in a variety of ways. Videos were prepared to promote the policy to the University community in a user-friendly manner and workshops took place with key groups that provide support to students and employees such as the Student Advisers, Student Union Sabbatical Officers and Dignity and Respect Contact Persons. Dignity and Respect was also incorporated into orientation for new employees and students and induction for groups such as the Residential Assistants. Training was also made available to people managers to enhance their skills to help resolve issues at a local level.

The Mediation policy was revised in 2018 to ensure that it was aligned with the principles of the revised Dignity and Respect policy and to ensure that informal resolution of issues is strongly supported.

The Gender Identity and Expression policy was developed in 2017 to value and encourage all members of the University community irrespective of gender identity, and to respect and recognise diverse gender identities and expressions. This policy was launched at a joint event organised by UCD's Equality Diversity and Inclusion Group in partnership with the Student LGBTQ+ Society during International LGBTI History Month in February 2018. Dr Katherine Zappone TD, Minister for Children and Youth Affairs, officially launched UCD's Gender Identity and Expression Policy and UCDSU's Foy-Zappone Award was presented to Tonie Walsh – Curator of the National LGBT 'Queer' Archive. This event also marked the 30th birthday of the UCD Student LGBTQ+ Society.

The policy was embedded throughout 2018 in a variety of ways. Over 100 frontline employees received training around gender identity and

expression, signage was agreed for all bathroom and changing facilities to support people to use the facilities of the gender that they identify with and also to ensure the availability of gender-neutral facilities in all buildings. Forms were amended to recognise that many genders exist and processes were developed to support those employees and students who wish to change their name in line with the gender they identify with, with or without a gender recognition certificate. Any evidence of the original name will be stored confidentially.

## EDI Initiatives/Events

### Athena SWAN

Five Schools are submitting applications for Athena SWAN in November 2018. Support has been provided for these Schools through a variety of measures. Two events were organised for the School Self-Assessment Team (SAT) members in collaboration with Advance HE and the EDI Unit in November 17 and June 18. A panel of SAT chairs from UK institutions also shared their experiences and learning at these events. An Infohub reporting system was developed which provides access to the data required by Schools to complete their application. Support was provided for the development of surveys and focus groups. A network of chairs of the SATs was established which created an opportunity for Schools to support each other and share good practice and ideas.

### Public Sector Duty

Funding was obtained from the IHREC in November 2017 to undertake a project to support the implementation of the Public Sector Duty in the Third Level Sector. A workshop was held in May 2018 with representatives from the University sector and a further workshop will be held in November 2018. The outputs from these workshops will feed into a guidance document on the implementation of the Duty for the third level sector.

### University of Sanctuary

UCD was awarded University of Sanctuary status in March 2018 in recognition of the commitments that the University has made in supporting refugees, asylum seekers and other displaced persons to study at UCD. A clear process has been developed to enable these students to gain access the University and a similar process is also currently being developed to support Scholars at Risk to come to UCD.

**Table 1: Students Reporting a Disability**

March 1st of Academic Year	2013/14	2014/15	2015/16	2016/17	2017/18
Students Reporting a Disability (Full Time)	1,311	1,349	1,473	1,564	1,939
Students Reporting a Disability (Part Time)	23	48	51	59	13
<b>TOTAL UCD Undergraduate Students</b>	<b>16,301</b>	<b>16,310</b>	<b>16,687</b>	<b>17,054</b>	<b>17,169</b>
<b>Students Reporting a Disability (%)</b>	<b>8%</b>	<b>9%</b>	<b>9%</b>	<b>10%</b>	<b>11%</b>

Note: Students who report a disability either through registration for supports with Access and Lifelong Learning; admission through DARE; OR indicating a disability on the Equal Access Survey.

### Equality Café

EDI collaborated with UCD School of Social Policy, Social Work and Social Justice in relation to a new equality-themed undergraduate module 'Investigating Inequality'. The theme for the module was 'Challenging Assumptions' where students drew on quantitative and qualitative data to identify and challenge assumptions made in relation to an issue relevant to the theme of inequality. Reports produced by students formed the basis of a series of posters used to increase awareness about equality issues and were demonstrated at an Equality Café event in April 2018.

### Membership of OUTstanding

UCD became a member of OUTstanding in August 2018. OUTstanding works directly with LGBT and ally leaders in organisations to drive cultural change and create an environment where everyone can succeed. Membership of this organisations creates a framework for supporting LGBTI employees in UCD such as availing of their mentoring programme, networking with other public and private sector organisations, seminars and leadership development.

### Establishment of EDI Multicultural group

The EDI Multicultural group was established in May 2018 to promote the University as a multi-cultural, inclusive campus through appropriate activities, policies, supports and frameworks in line with UCD's Strategy as Ireland's Global University. Priorities include the establishment of an International Staff Network, review of best practice around onboarding and induction to support international employees joining UCD, and also a focus on languages, faith and religions.

### UCD Access Symposium

The UCD Access Symposium was held on Thursday 31 May, 2018. This year's symposium celebrated the 30th anniversary of the establishment of the University's supports for students with disabilities. It provided an opportunity to bring together all those working, researching, or simply interested in the area of disability in UCD.

The symposium was officially opened by the Minister for Higher Education, Mary Mitchell O'Connor TD. Inspirational guest speakers were Dr Vianne Timmons, President and Vice-Chancellor of the University of Regina, Saskatchewan, Canada and UCD alumnus Dr Caroline Casey, founder of the Ability Awards and Binc.

### Opportunities

Whilst there are challenges to overcome in relation to EDI, there are also many opportunities available to progress the EDI agenda.

- The proposed development of an EDI Research and Curriculum Development sub-group will ensure that research informs EDI strategic actions and that EDI priorities can be reflected in curriculum developments, with a co-ordinated approach to seeking funding for EDI related projects;
- The establishment of Vice-Principals for EDI will support the mainstreaming of EDI across the University and ensure that EDI remains on the agenda as a key implementation challenge. This mainstreaming will be further supported through the establishment of EDI representatives at School level;
- The publication of the EDI strategy will create a clear framework for EDI with clear lines of responsibility for development and implementation and metrics for measuring success;
- University for All is a whole-institution framework that facilitates and weaves inclusion into the fabric of the University at every level, and in so doing, moves student access, participation and success from the margins to the mainstream. It is a systemic response, which extends access beyond entry, to include an inclusive learning environment, designed for the full range of human diversity, rather than a perceived notion of a typical or so-called 'traditional' student. This initiative affects all facets of campus life, including teaching and learning, student support, and the built and technological infrastructure.

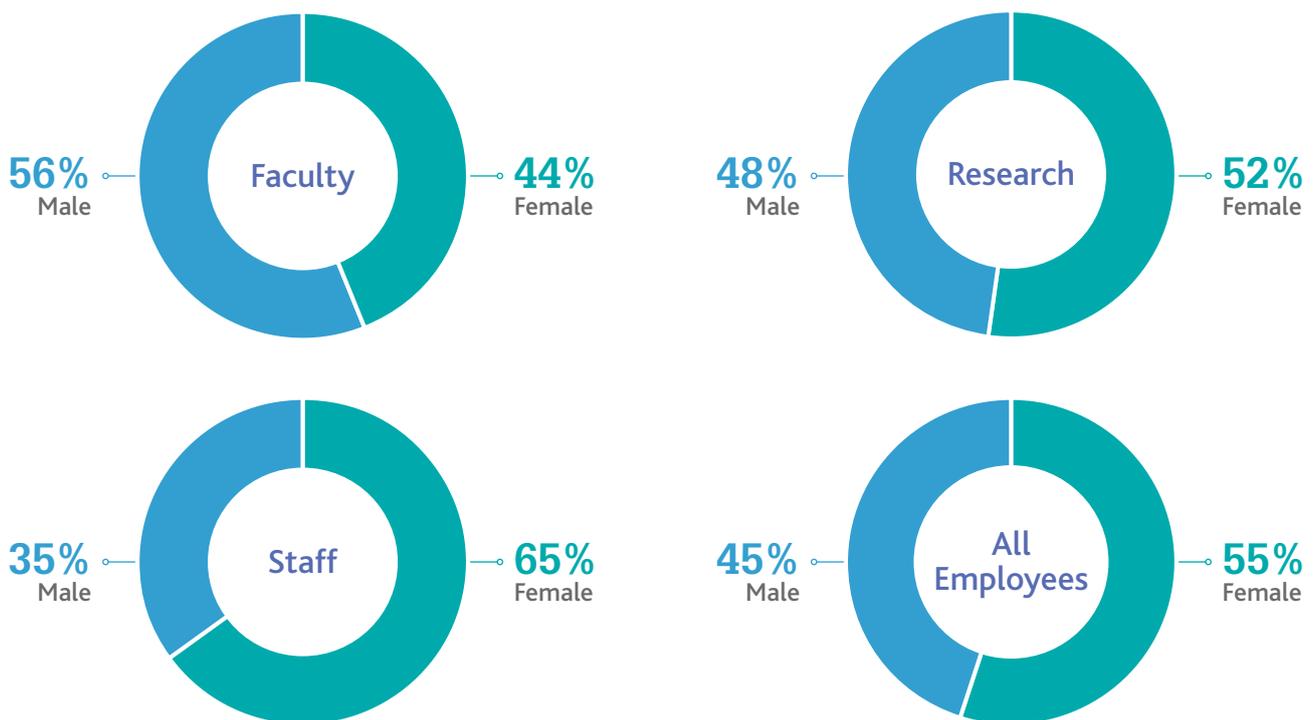


Left: Prof Veronica Crosbie (Chair of the University of Sanctuary Steering Committee), UCD President, Prof Andrew Deeks, Emily Logan (Chief Commissioner, IHREC). Right: Equality Café Event – Investigating Inequality Module in School of Social Policy, Social Work and Social Justice

Employees by Gender

Staff Category		Female	Male	Total
FACULTY	Full Professor	40	128	168
	Professor	28	64	92
	Associate Professor	104	144	247
	Lecturer Above The Bar	248	266	514
	Lecturer Below The Bar	30	30	60
	Other Academic & Teaching	80	50	130
	<b>Total</b>		<b>529</b>	<b>682</b>
RESEARCH	Researcher	220	241	461
	Research Support	155	111	266
	<b>Total</b>	<b>375</b>	<b>352</b>	<b>727</b>
STAFF	Academic Admin/Professional	377	92	470
	Administrative/Professional	392	197	590
	Technical	127	114	241
	Other Support	136	149	286
	<b>Total</b>	<b>1,033</b>	<b>553</b>	<b>1,586</b>
<b>All Employees</b>		<b>1,937</b>	<b>1,587</b>	<b>3,525</b>

Male/Female Employee Ratios





UCD Centre for Creativity concept entry quad (Steven Holl Architects).



**David Kelly  
Bursar**

# Finance and Capital Development

The 2017/18 year saw the continuation of progress achieved by the University in recent years, with a small surplus generated on its HEA core-funded activities of €0.5 million, despite the financial challenges facing the university sector.

## State Funding of Higher Education

Underfunding of the sector continues to be the biggest financial challenge facing the University, with consequent pressure on operational and infrastructural sustainability as student numbers increase. Despite successive reductions in State funding and increased demand between 2008 and 2015, UCD made progress towards meeting its strategic objectives while remaining within budget during that period, albeit at the expense

of student:staff ratios, student support services and campus infrastructure.

The recurrent grant reductions, which had been a feature of the system since 2008, were halted in 2016, and since 2017, some additional State funding has been awarded to the higher education sector. However, the bulk of this funding is earmarked for designated purposes, including partial pay restoration. Concerns about long-term financial sustainability remain and the need to deal with the infrastructural deficit and ongoing requirements must be addressed urgently.

Budget 2019 did very little to address the lack of State funding to universities. The allocation of €57 million in the national budget as additional funding on top of existing commitments on pay awards, while welcome does not address the core funding gap. State funding per student remains virtually unchanged, as the small allocation of

**// The allocation of €57 million in the national budget as additional funding on top of existing commitments on pay awards, while welcome does not address the core funding gap //**

incremental funding announced in the Budget is absorbed by increasing student numbers. The Budget also failed to address the funding deficiency in much needed capital refurbishment programmes.

In 2014, the Minister for Education and Skills established the Expert Group on Future Funding for Higher Education 'to identify and consider issues related to the long-term sustainable funding of higher education in Ireland and to identify funding options for the future'. Its central recommendation was that Ireland needs to substantially increase the level of investment in higher education to ensure that the sector can deliver fully on its role in supporting national economic and social development. The report sets out the scale of funding required and three funding options were identified to deliver the increased investment for institutions and students. The three funding options identified were: a predominantly state-funded system; increased state funding with continuing student fees; or increased state funding with deferred fee payment through income-contingent loans.

The Expert Group, chaired by Peter Cassells estimated that the gap in core funding in Irish higher education institutes to 2021 remains at in excess of €550 million and this gap is set to grow to €1 billion by 2030. The increase in core funding is needed to enable universities to absorb the significant growth in student numbers and also to begin the process of addressing the underlying quality issues which have arisen from years of underfunding that are now becoming evident in international ranking systems. This extra funding would facilitate an improvement in student:staff ratios, better engagement with students, and improved support services for academic staff and students. The group also called for an urgent review of the capital building programme and estimated that capital investment of €5.5 billion was needed over the next 15 years to adequately cater for increased student numbers, capital upgrades, health and safety issues, equipment renewal and ongoing maintenance. It further recommended an additional €100 million per annum to deliver a more effective system of student financial aid.

Since publication, the Oireachtas Education and Skills Committee has been considering these options. There has been broad acceptance of the need for additional sectoral funding, with much debate about the relative merits of the various options, but a decision is awaited regarding the source of this funding.

## Review of Allocation Model for Funding Higher Education Institutions

The Government has announced that it will carry out a review of the quality of the third level education system. This review comes as universities await implementation of a new funding model for the sector, following demands from faculty, staff and students alike who have voiced their concerns in recent years about the dramatic decline in state funding to third-level institutions.

The Higher Education Authority has taken into account the findings of the Expert Group noted above in a review of the allocation model for funding higher education institutions and, following a consultation

**// The University continued to focus on alternative non-exchequer funding to maintain a financially viable position. A strong emphasis has continued to be placed upon international student recruitment //**

process, a report including 33 recommendations for a new allocation model was published in late 2017. Some of these recommendations are being phased in with effect from 2018. However, other recommendations are dependent on additional funding to the sector as recommended by the Expert Group.

The revised allocation model includes a recommendation for an adjustment to annual allocations to apply discipline-based weightings to all teaching income, which would benefit UCD in the medium term, although the impact of any changes is subject to an annual moderating factor.

The Higher Education Authority's current approach to funding universities consists of three components:

- A block grant for EU undergraduate fees and recurrent grant allocation, driven primarily by student numbers, which are weighted by the relative costs of providing education in different disciplines;
- Directed top-sliced allocations which are made for specific strategic purposes, such as shared services initiatives;
- A performance-based funding component, which allows for the withholding of up to 10% of institutional recurrent funding on the basis of performance, which centres around a system of agreed three-year compact agreements where all higher education institutes commit to actions and targets.

## School Strategic Planning and Budgeting

Schools and support units updated their five-year plans in 2018 alongside their strategic plans as part of the annual financial planning cycle. However, uncertainty over both the level and the nature of state funding continues to be a significant problem for units in preparing their financial plans.

The Bursar's Office is assisting individual Colleges and Schools to develop 5-year financial plans which broadly align with the strategic objectives of the University and to provide a multi-annual view of each unit's planned activities and resource requirements.

In keeping with a policy of devolving decision-making to local level where appropriate, each Head of School now has enhanced financial responsibility within agreed targets. The close collaboration with the academic community will continue in order to develop the future direction of Colleges and Schools on a sustainable basis.

## Finance and Capital Development

Left: UCD Centre for Creativity concept (Steven Holl Architects). Centre: UCD O'Brien Centre for Science. Right: UCD Residential Masterplan Fulcrum Building.



## Incentive Schemes

2017/18 marked the fourth year of the performance-based budgetary model, whereby additional resources are allocated on a formulaic basis between those Colleges and Schools generating additional income, and the institution. The model includes all fee income, whether EU or non-EU, undergraduate or graduate sources. Distribution of additional income to schools enables them to exert more control over their finances, but is very limited in comparison to the State funding withdrawn in recent years and is not a substitute for restoration of adequate funding.

Consistent with the UCD Global Engagement Strategy, fee income from international students continues to grow strongly. Fee scholarships are used to mitigate hardship and as a marketing tool.

During the year, the Governing Authority approved a major initiative to enhance the University's resources in support of Strategic Objective 10 – Overcome financial, human resource management and other external constraints. This initiative, under which additional faculty will be employed to improve the faculty:student ratio, will be funded from two principal sources, i.e. pay savings arising from unexpected departures and delays in budgeted staff appointments; and net revenue from the new UCD English Language Academy. The new appointments will be phased in over the next few years as funding permits.

## Planning and Budgeting System

In 2017 the University announced that it had procured a new Oracle system for planning and budgeting, to improve the efficiency and quality of the annual budget process, to enhance regular forecasting and reporting and to provide a platform for further future improvements in financial and other planning activities.

The key system features have been implemented in preparing the 2018/19 budget and it is anticipated that further enhancements will be introduced for subsequent annual budget cycles.

## Procurement

During the 2018 year, UCD Procurement and Contracts Office, together with the Office of Government Procurement, provided

continued support to manage tenders for expenditure on supplies and services, as well as managing tenders for key licence concessions such as campus cafés/restaurants. The Office worked closely with budget-holders within UCD to ensure we achieved best value for money on expenditure as well as ensuring compliance with UCD, National and EU Procurement requirements.

## Increase in Non-State Funding

The University continued to focus on alternative non-exchequer funding to maintain a financially viable position. A strong emphasis has continued to be placed upon international student recruitment.

Summer at UCD is the unit tasked with letting and managing campus accommodation during the summer. 2018 showed continued growth of partnerships with major universities in the USA – most notably the University of California. Study tours continue to be the central focus for the UCD summer staff. Language schools are a further key source of revenue.

In addition, the hosting of high-profile groups such as Special Olympics and a wide range of conferences provided an excellent platform to showcase UCD's world-class academic, residential and sporting facilities. Support and collaboration with the UCD International Office proved invaluable.

## Campus Development

UCD has ambitious plans to further develop world-class facilities and to reimagine the campus in a way that supports the vision of the UCD Strategy 2015-2020.

The UCD Strategic Campus Development Plan 2016-2021-2026 guides the development of the physical estate and outlines plans to expand and improve academic facilities, increase on-campus student residences, provide greater social and cultural engagement, and to promote knowledge-based, industry-linked research and innovation facilities.

During academic year 2017/18 the University has made significant progress towards delivering a number of key pieces of infrastructure, each of which will be valuable additions to the University estate, will



// The delivery of the Residential Masterplan will be transformative for the University, enabling a residential population of 6,000 people over the lifetime of the plan //

further enable world-class teaching, learning and research and will help to deliver a sustainable and vibrant campus.

## Recent and Planned Capital Developments

This year UCD took an important step towards transforming the main entrance of the Belfield Campus and adjoining areas. The University launched an international design competition which challenged participating teams to present a design vision for a highly-visible and welcoming entrance precinct and to create a concept design for a new Centre for Creativity building that expresses the University's creativity.

Following strong international interest in the competition, six design teams were selected to progress to the second stage. A jury, chaired by UCD President, Professor Andrew Deeks and including a number of internationally renowned architects and designers was formed to evaluate the submissions. The final submissions from the shortlisted entrants were displayed in the O'Brien Centre for Science and the Student Centre, with the UCD community invited to comment on each submission, in advance of the jury convening. The jury met on 10 July to assess the design team presentations and submissions, and Steven Holl Architects was selected as the competition winner. Holl's placemaking strategy focuses on establishing the Centre for Creativity as a gateway presence at the front entrance, which cues to seven new quadrangles of open green space, designed to enhance the campus' historic features and woodlands. The Centre for Creativity, is set by a plaza and a reflecting pool, features abundant use of natural light and the auditorium echoes the shape of UCD's iconic dodecahedral 1972 water tower. The Centre is intended to encourage creative collaboration and interaction with a 'circuit of

social connection' that allows students, faculty and visitors to see into maker and classroom spaces through glass walls but also respects deep creativity by providing spaces for concentration and silence. It is intended that these facilities will be used to address the priority requirements of UCD College of Engineering and Architecture, and lay the foundations for an academic district in proximity to the Engineering and Materials Science Centre. The University will work with Steven Holl Architects over the coming year to refine the concepts presented in the plan and move to detailed design and planning.

A procurement process has been undertaken to develop designs for a new Teaching and Learning Building. This new building will provide dedicated teaching and learning facilities that will facilitate growth across the University.

Under the new Strategic Housing Development system, the University was granted planning permission for the first two phases of the UCD Residential Masterplan. Demand for on-campus residential accommodation is strong, and UCD is committed to developing additional accommodation facilitates for students. The delivery of the Residential Masterplan will be transformative for the University, enabling a residential population of 6,000 people over the lifetime of the plan. Supported by additional recreational, retail, dining and other facilities it will further invigorate the campus and provide much-needed student residences in the city. Phase 1 has now commenced, which will provide an additional 924 beds, with a targeted delivery date to coincide with the beginning of academic year 2020/2021.

Thanks to a philanthropic donation, UCD will develop a running track within the Sports and Student Amenities Precinct. This new piece of sporting infrastructure will enable athletes of all levels to train on the Belfield campus and marks another valuable addition to our on-campus sports facilities. As a result of the donation, UCD has also commissioned a design team that will not only design and deliver the running track, but also to look beyond – to the long-term potential of the area and to present an ambitious vision for the Sports and Student Amenities Precinct.

Work has commenced on the extension of the UCD Quinn School of Business. This will be a significant addition to the University and will provide a leading edge resource, delivering additional teaching space, study areas and meeting rooms as well as a 320-seater lecture theatre.

Over two phases, four additional floors were upgraded in the Newman Building. This phased refurbishment programme is greatly

## // One of the most popular projects completed in the past year was the installation of a chess garden adjacent to the upper lake //

enhancing the internal spaces by increasing natural light penetration, widening circulation spaces, providing new break-out and meeting areas and replacing old décor and furniture. Furthermore, upgrades to lighting, windows and insulation is resulting in reduced energy usage and improved comfort levels for building users.

The UCD Confucius Institute for Ireland opened its doors for the beginning of academic year 2018/19, providing quality facilities and a unique space for Chinese language and cultural engagement in Ireland. In addition to providing high-quality space, it forms an interesting and attractive architectural feature at southern side of the campus.

The renovation of Newman House, located on St Stephen's Green is progressing well. Newman House will be home to the Museum of Literature Ireland (MoLI), which will be a significant addition to UCD's historic, literary and cultural assets and will be an attraction of international appeal.

UCD has committed to the built heritage of the campus including the preservation and restoration of the period houses. The restoration of Ardmore House has commenced, with plans to restore period features, formalise the building's function for reception, meeting and office space and bring the building into compliance with modern fire, safety and disability access standards.

Work has commenced on a 1,100m<sup>2</sup> expansion of Merville House, which is home to Nova UCD. The East Courtyard development will ensure UCD can meet demand for high-quality incubation facilities, providing flexible office, laboratory and informal meeting areas. In line with the Programme for the Preservation of UCD Period Houses, period wings will be retained and renovated.

## Hospitality Services, Conferences and Events

UCD had another successful year in terms of hosting conferences and events on campus, with 13 international association conferences and over 5,500 international delegates welcomed to the Belfield campus over the summer period alone.

Work is progressing well on the new University Club, with a target completion date of April 2019. This will provide a much needed venue for faculty, staff, researchers, alumni and partners of UCD to meet, eat and socialise at the heart of the Belfield campus and will broaden the University's capacity to host conferences and events.

The University continues to work with Healthy UCD and on-campus food service providers to offer healthy food choices to the UCD Community. High-sugar sweetened beverages are now no longer stocked on campus,

which was just one of a number of initiatives progressed over the year. Other initiatives included the addition of a 'Free From' shelf in the campus convenience store, calorific information displayed within food outlets and the running of a Healthy Eating week where over 25 food suppliers showcased healthy foods that are available on campus. The weekly Street Food Market has gone from strength to strength and was named as one of the top street food stop-offs in the Sunday Independent.

## Landscaping and Biodiversity

Notwithstanding what was a challenging year for biodiversity – with spring snowfall followed by summer drought – there was a number of exciting landscape developments on campus.

The woodland setting of Belfield presents a beautiful backdrop to the built environment and is a valuable amenity and biodiversity resource. New areas of woodland have recently been planted to link existing sections of woodland at Fosters and Belfield woods, which reinforce the woodlands and provide wildlife corridors which serve to strengthen biodiversity. One of the most popular projects completed in the past year was the installation of a chess garden adjacent to the upper lake, an initiative suggested by a member of the student community. This garden with its giant chess board, pollinator friendly planting, and views of the lake and science precinct, has helped to animate this area of campus, and give a welcome break-out space.

The Green Campus initiative, which involves faculty, staff and students working together to improve the environmental sustainability of the campus is progressing well. A number of student and staff led projects have been delivered in the past year including newly developed wildflower meadows, installation of insect hotels, a habitat survey of the campus, and the exciting Duvets for Dogs project.

As part of the Green Campus programme, UCD has recently joined the All Ireland Pollinator plan, a countrywide initiative to help support and sustain pollinating insects. The natural advantages of having a sylvan campus, in addition to management practices and projects that have already been initiated, will enable the University to fully engage with this very worthwhile programme over the coming years.

## Commuting

UCD continues to work towards sustainable transport targets as set out in the UCD Travel Plan 2016-2021-2016. The University is progressing well towards the overall target which is to grow usage of sustainable transport modes by the UCD community to 81% by 2026. Through a mix of public transport, walking and cycling, the University reached an impressive 76% in 2017/18.

Sustainable transport choices have been facilitated by several measures introduced by the University, including the UCD-DART shuttle bus, which has grown in popularity and provides an efficient way to move from Belfield to Sydney Parade station. Other initiatives include the introduction of the 'Bleperbike' bike sharing scheme to the Belfield and Blackrock campuses and increasing the number of secure bike-parking spaces and lockers. A new bus service from UCD to Citywest, the 175, now provides direct access to the Belfield

campus from south west Dublin, serving Citywest, Tallaght, Knocklyon and Rathfarnham, as well as an interchange with the Luas in Dundrum, which offers an additional commuting option for many.

## Energy

UCD has made further progress towards achieving the 2020 targets, having improved energy efficiency by 30.4% to date. This is reflective of the assistance of the University community, as well as targeted investments made to improve energy performance and reduce carbon emissions.

The University is continuing the roll-out of low-energy LED across all buildings, as well as for external lighting. The additional projects delivered this summer mean that over 50% of University buildings have now been upgraded to LED, resulting in significantly reduced electricity usage and costs as well as decreased carbon emissions.

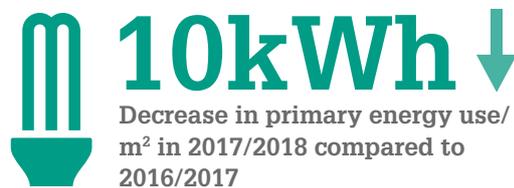
The University has now switched on our new combined heat and power (CHP) system in the UCD energy centre. CHP produces electricity with heat produced as a by-product. This heat is used in buildings and to provide hot water. For this reason it is more efficient than electricity produced by power stations. These new, modern, efficient engines will play an important role in helping UCD reach

its 2020 targets by considerably improving the efficiency of the University's electricity and heating supply.

Following the successful installation of a 100kW solar photovoltaics (PV) system in Lyons Farm in 2017, a smaller system was installed in 2018 in the Blackrock Campus. This system will produce renewable electricity from the sun which will be used directly in University buildings. UCD now has approximately 265kW of solar PV installed and further opportunities for new installations are being explored across the UCD estate.



David Kelly  
Bursar



	2012/2013	2013/2014	2014/2015	2015/2016	2016/2017	2017/2018
Total Area m2*	297,565	314,400	314,400	319,706	319,706	319,706
Electricity kWh	27,296,800	26,304,456	24,495,179	26,064,323	27,471,804	29,876,628
Gas kWh	70,706,905	70,970,958	66,771,867	61,444,804	54,158,751	49,284,855
<b>Total Primary Energy kWh**</b>	<b>138,212,711</b>	<b>135,385,463</b>	<b>125,207,367</b>	<b>123,966,415</b>	<b>118,639,005</b>	<b>115,460,428</b>
Primary Energy (kWh) per m2	464	431	398	388	371	361

\*Area excludes residential accommodation

\*\*Primary energy refers to energy in its natural form and is how UCD's energy performance is tracked





Some of the 130 plus employees who took part in the Get Ready for Summer bootcamp organised by Culture & Engagement – UCD HR in conjunction with Healthy UCD.



**Tristan Aitken**  
Director of Human Resources

# Human Resources

We are well advanced in the delivery of the UCD HR Strategy 2016-2020 – Growing through people. This HR strategy links directly to UCD’s overarching strategy and commits to the achievement of specific and measurable deliverables.

Since I reported last year, we continue to deliver key people-related initiatives on time, collaborating with colleagues across our six Colleges, five VP areas, 37 Schools and support units, research institutes and academic centres. The work that we are doing has a day-to-day impact on every member of our community. Under the HR strategy, we are working hard to transform our service offering and make

it simpler, faster and more people-focussed. Examples of completed projects include the launch of the HR Helpdesk as the primary point for all HR queries, a new resourcing (recruiting) model with resourcing consultants supporting all Colleges and Units and new more efficient online forms (e.g. for hiring). Underpinning all of this are our operational teams, who support high volumes of activity.

Left: UCD Colleagues engage at the UCD Engage Day on 7 November 2017 which attracted over 1,000 employees. The event aimed to profile the range of supports, development opportunities and benefits available to UCD employees.

Centre: Pictured at the seminar Disability and Inclusion – Strategies that Work in Practice, held in October 2017 were (L to R) Marcellina Fogarty, UCD Equality, Diversity & Inclusion Manager; Tina Lowe, UCD Campus Accessibility Officer; Tristan Aitken, Director UCD HR; Elaine Howley, Director of Policy & Advocacy, NCBI Services; and Leslee O’Loughlin, Group Human Resources Manager, Republic of Ireland, Enterprise Rent-a-car.

Right: UCD Engage Day, held in O’Reilly Hall on 7 November 2017.



A key component of our HR strategy is the enhancement of a performance culture. During the period of the Report, extensive collaboration with our Trades Union colleagues occurred, with the objective of reaching an agreement for introduction of the Performance for Growth (P4G) framework in the academic year 2018/19. This objective was achieved.

The introduction of P4G will help us deliver our mission as stated in our Strategy 2015-2020, particularly 'providing a supportive community in which every member of the University is enabled to achieve their full potential' while aligning their objectives with the mission and strategy of UCD.

P4G will be officially launched in March 2019 and there will be a phased rollout in which the UMT (University Management Team) and the ELG (Extended Leadership Group) will start their P4G conversations in December 2018.

Under the Developing our Talent component of the HR Strategy, we continue to deliver against this. A Leadership and People Manager Development Programme was attended by 93 senior academic and service unit managers. Alongside this, a complementary People Manager Development Programme was delivered to 296 managers and 21 women completed a five-day Aurora Leadership Programme. Further, a job families framework was launched for professional and administrative staff to provide a career and development planning tool, giving visibility of the range of roles and potential career paths across UCD and offering clearer and consistent description of competencies required for different roles.

The HR team continues to be a core contributor in the delivery against the University's Gender Equality Action Plan and excellent progress is being made. The work of the Employee Engagement Network and the Culture and Engagement team has led to several innovative initiatives such as the Engage Day where over 1,000 colleagues attended the inaugural event designed to highlight the range of development opportunities, supports and benefits available to them. HR colleagues have also played a leading role in initiatives that have taken place across the University, such as Healthy UCD, UCD Agile and promotion of mental health initiatives. Another important activity in 2017/18 has been the implementation of College, School and Unit action plans to support the priorities arising from the 2016 Culture and Engagement Survey and help prepare for the 2018 Survey that has just been launched.

I am proud of the depth and breadth of services that we provide to our UCD colleagues and could not do it without the commitment and hard work of my HR team that continue to make UCD a great place to work.



**Tristan Aitken**  
Director of Human Resources

**// The work of the Employee Engagement Network and the Culture and Engagement team has led to several innovative initiatives such as the Engage Day where over 1,000 colleagues attended the inaugural event //**





Pictured at the Annual College Lecture are (l-r): Regina Úi Cholation, Paul Muldoon and Prof Sarah Prescott.



# College of Arts and Humanities

The academic year 2017/18 has been an exciting and significant one for the College of Arts and Humanities across the range of our educational, research, engagement and community activities.

**Professor Sarah Prescott**  
**College Principal and**  
**Dean of Arts and**  
**Humanities**

**Associate Dean for Arts**  
**and Humanities**

Associate Professor Fionnuala  
Dillane

**BA Arts Programme Co-ordinator**  
Dr Gillian Pye

**BA Humanities Programme**  
**Co-ordinator**

Associate Professor Paul Rouse

**Vice-Principal for Global**  
**Engagement**

Dr Selena Daly

The key educational focus for the College this year was developing the structures to support our new innovative BA Arts and Humanities programmes and to promote the new and revised programmes to the next intake of students. The new portfolio of programmes will enhance the provision of a broader educational experience across the College and provide more opportunities for students to engage in internships, employment and international study experiences, helping prepare our graduates for further study and a diverse range of careers after graduation. Key initiatives in educational excellence were also furthered by the Teaching and Learning forum, undertaken in collaboration with the College of Social Sciences and Law, which focussed on research-led teaching and innovative approaches to assessment.

Aligning education excellence and community engagement, the Schools of Irish, Celtic Studies and Folklore and Art History and Cultural Policy organised a Summer School in Irish Art and Language exploring our cultural heritage through Irish art and the Irish language. A Graduate Research Symposium was held, in collaboration with the UCD Humanities Institute, on 19 April 2018, and enabled our PhD students to present their research and engage in the vibrant research culture of the College through a variety of interesting panel discussions.

The College continues to attract a range of international and Irish funding bodies to support the excellence of its research, including, the Irish Research Council, Enterprise Ireland/Horizon 2020, The Wellcome Trust, The Heritage Council, and the Royal Embassy of Saudi Arabia Foreign

Foundation Research Project. The College also received funding to create the postdoctoral John Pollard Newman Fellowship in Creativity which seeks to appoint a creative researcher/writer to the College in 2018 under the guidance of the recently appointed Professor in Creative Writing, Professor Ian Davidson (UCD School of English, Drama, and Film).

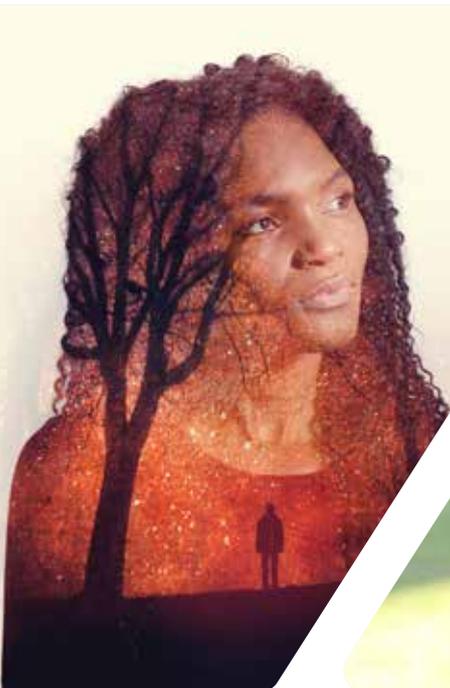
Among the numerous colleagues in the Arts and Humanities who received awards and attracted evidence of esteem for their research in the last year was Associate Professor Lynda Mulvin, UCD School of Art History and Cultural Policy, who was admitted to the Society of Antiquaries of London. Society Fellows include many distinguished international archaeologists, art and architectural historians holding positions of responsibility across cultural heritage. Also from UCD School of Art History and Cultural Policy, Professor Kathleen James-Chakraborty was elected to the Board of the Society of Architectural Historians. Professor Harry White, UCD School of Music, has been named Ireland's first ever Corresponding Fellow to the Croatian Academy of Sciences and Arts, one of Southern Europe's oldest national academies in recognition of his longstanding contribution to musicology in central Europe. The leadership potential of female colleagues in the College was also recognised by the successful engagement of Associate Professor Emily Mark-Fitzgerald (UCD School of Art History and Cultural Policy) and Dr Siobhán O'Donovan (UCD School of Languages, Cultures, and Linguistics) in the UCD Aurora programme for 2017/18.

This year also saw the launch of the UCD Arts and Humanities Research Advisory Network (RAN) comprising full professors across all the schools in the College. The establishment of the RAN is an important step in enhancing our research profile, supporting a dynamic research environment, and fostering a deeper interdisciplinary culture and offers support on grant application,

**// The key educational focus for the College this year was developing the structures to support our new innovative BA Arts and Humanities programmes and to promote these new and revised programmes to the next intake of students //**

publication, and developing the public impact of our research. The College continued to develop its cutting-edge research themes which will be launched next academic year. The College has also developed a collaborative partnership with the University of Nottingham to enable cross-institutional and international research and education initiatives, enabled by the University's membership of the Universitas 21 group.

Throughout the academic year, the College's constituent schools and research institutes organised and hosted a number of distinguished lectures, talks, seminar series and international conferences, including 'An Evening with President Clinton, to mark the 20th Anniversary of the Good Friday Agreement', (UCD Clinton Institute, 9 April 2018); 'The Trial Art Installation', Old Courthouse, Kilmainham Gaol, (13-26 April 2018 UCD Centre for the History of Medicine); 'Celebrating 50 Years of Anglo-Irish Literature' with the Augustine Martin Memorial Lecture by Professor Roy Foster, 'All The House I Have: Yeats and Friendship'. UCD, (26 April 2018, UCD School of English, Drama, and Film). Our current Keith Cameron Chair of Australian History,



Left: 'Think Bigger' imagery utilised by UCD College of Arts and Humanities. Right: UCD President, Prof Andrew Deeks presents Margaret Atwood with the UCD Ulysses Medal.

**Vice-Principal for  
Graduate Studies**

Associate Professor Elva Johnston

**Vice-Principal for Teaching  
and Learning**

Dr Naomi McAreevey

**Vice-Principal for Research,  
Innovation and Impact**

Professor William Mulligan

**UCD School of Art History and  
Cultural Policy**

**Head of School**

Associate Professor Nicola Figgis

**UCD School of Classics**

**Head of School**

Dr Alexander Thein

**UCD School of English, Drama  
and Film**

**Head of School**

Professor Danielle Clarke

**UCD School of History**

**Head of School**

Professor Robert Gerwarth

**UCD School of Irish, Celtic  
Studies and Folklore**

**Head of School**

Professor Regina Uí Chollatáin

**UCD School of Languages,  
Cultures and Linguistics**

**Head of School**

Professor Bettina Migge

**UCD School of Music**

**Head of School**

Associate Professor Wolfgang Marx

As of September 2017

**// The College hosted a number of significant and high-profile events this year commencing with the inaugural College Annual Lecture which was established to provide an annual showcase to celebrate and promote the Arts and Humanities for UCD and the broader cultural and creative community //**

Professor Amanda Nettelbeck, chaired the Annual Keith Cameron lecture given by Professor Jane Lydon, University of Western Australia (25 May 2018, UCD School of History). The College hosted the 7th Biennial Conference of the Aphra Behn Europe Society (27-29 June) welcoming amongst others author and poet Maureen Duffy and Professor Robert J Hume from Penn State University. UCD School of Classics hosted the International Ancient Warfare Conference and the UCD School of Irish, Celtic Studies and Folklore, in collaboration with UCD Special Collections, curated the *Seoda Scripte: A Glimpse into Ireland's Manuscript Heritage Exhibition* in June 2018. The UCD School of Languages, Cultures and Linguistics and the UCD School of English, Drama and Film jointly hosted a lecture by Professor Jane Koustas, James M. Flaherty Visiting Professor with the Ireland Canada University Foundation in February 2018. The UCD School of Music welcomed the Visiting Artist-in-Residence from the Indonesian Institute for the Arts, Pak Sumaryono, who worked with the UCD Gamelan Orchestra, culminating in a performance with the Orchestra in November 2017.

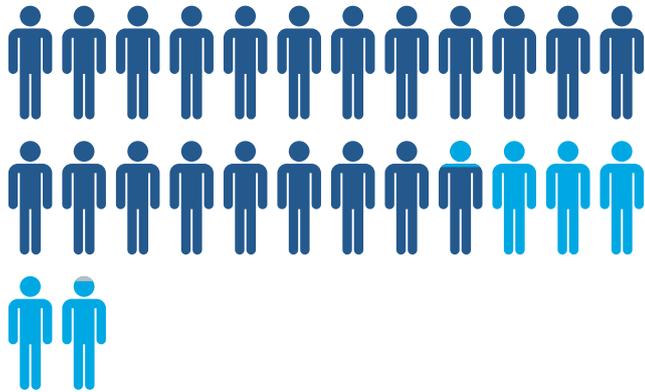
The College hosted a number of significant and high-profile events this year commencing with the inaugural College Annual Lecture which was established to provide an annual showcase to celebrate and promote the Arts and Humanities for UCD and the broader cultural and creative community. We were delighted that the first lecture in the series was delivered by the renowned poet Paul Muldoon (Professor of Poetry, Princeton University) with a fascinating and entertaining lecture entitled *'The Drowned Blackbird: An Introduction to 18th Century Ulster*

*Poetry'*, a multidisciplinary exploration of the rich tradition of poetry in South East Ulster. We were similarly delighted to honour Michael McGlynn, composer, producer and artistic director of the vocal ensemble Anúna, as the Arts and Humanities Alumni Award Winner in 2017. It was a pleasure to invite Michael back to his alma mater to work with and inspire current Arts students.

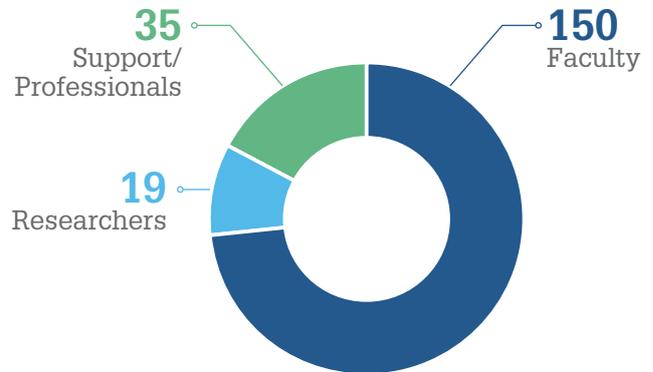
A further pleasure was the chance to honour the work of Niall MacMonagle by the conferment of an honorary degree of Doctor of Literature in 2017. After an initial cancellation due to the heavy snowfall in March 2018, the College co-organised a major literary event in a packed O'Reilly Hall in collaboration with Professor Jane Urquhart, Canadian author and visiting 2017/18 Craig Dobbin Professor of Canadian Studies, Dr Paul Halferty, UCD School of English, Drama and Film, UCD Centre for Canadian Studies, and UCD Communications. 'Imagining: Home' on 6 June 2018 celebrated the deep literary connections between Ireland and Canada by focussing on stories – real or imagined – that link our two countries with guests Margaret Atwood, John Banville, Anne Enright and Paul Perry. The evening concluded with the internationally acclaimed author Margaret Atwood being awarded the Ulysses Medal by UCD President, Professor Andrew Deeks.

**Professor Sarah Prescott  
College Principal and Dean of Arts  
and Humanities**

**2,596** Total students in Ireland



**203** Total staff (FTE)



**2,177**  
Undergraduate students (FTE)

**419**  
Graduate students (FTE)

 = 100 people (approx.)

**€2.31m**   
Research awards



Professor Roy Foster at the Gus Martin Memorial Lecture, marking the 50th anniversary of Anglo-Irish Literature at the School of English, Drama and Film.



UCD Michael Smurfit Graduate Business School has again ranked among the world's leading business schools with multiple programmes ranked in the global top fifty.



**Professor Anthony Brabazon**  
College Principal/Dean  
UCD College of Business

# College of Business

As Ireland's leader in business education, the UCD College of Business continues to deliver transformative learning experiences through innovative programmes and partnerships that develop tomorrow's business leaders to have an impact on society and in their chosen career.

Our diverse community of students, faculty and staff from over 60 countries creates a dynamic teaching and learning environment on the doorstep of one of Europe's business capitals.

During the past year, the College made significant progress towards its strategic goals, which are based on four pillars: a commitment to research, innovation and impact on business and society; transformational learning; in the world; and for the world.

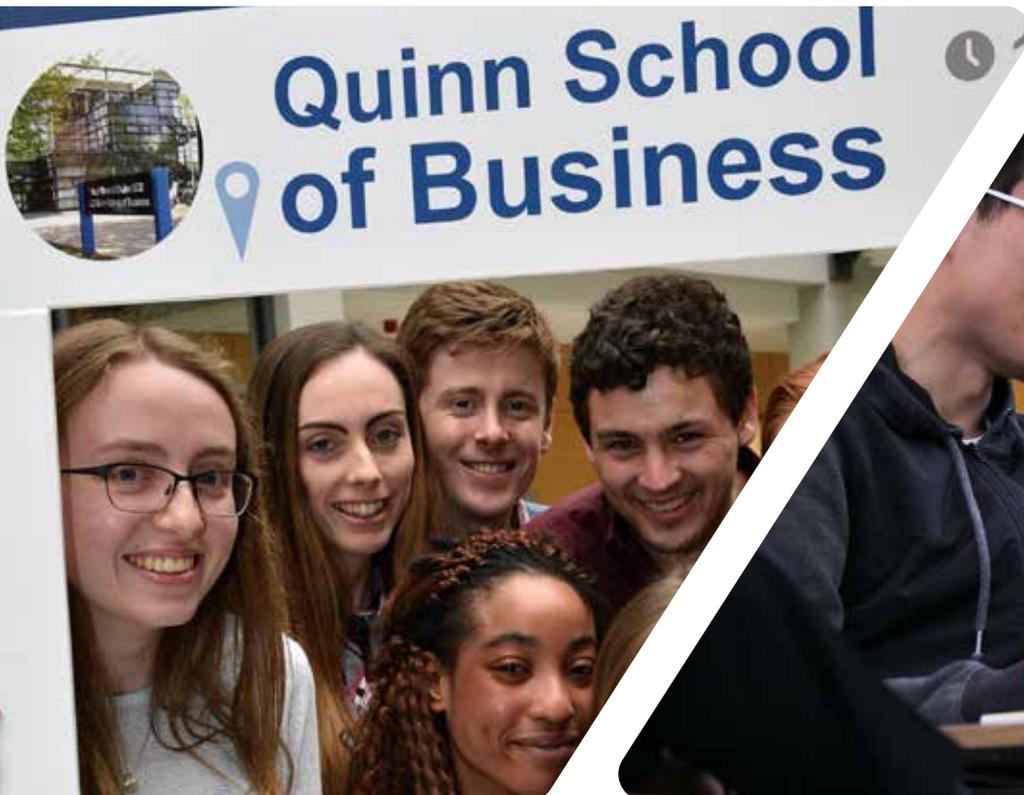
## Research, Innovation and Impact

The College continues to invest in supporting research activities, and we welcomed a number of new faculty to our community in line

with our focus on recruitment of committed educationalists who have international experience, and strong teaching and research capabilities.

The increased emphasis on research has resulted in a doubling of the College's publication output in the highest ranked academic journals (FT50 and ABS4/4\* journals) over the past five years. External research funding awards to College faculty have trebled in the same period.

Notable achievements during the past year include an ERC Consolidator Award for Professor Susi Geiger for the project, *Misfires and Market Innovation*; an IRC Caroline Postdoctoral Fellowship Award for Professor Mark Pagell's project, *From Organized Irresponsibility to Shared Responsibility in Global Supply Chains*; and an



Left: The Bachelor of Business Studies Research Expo brought research to life for undergraduate students as they showcased their scholarly achievements to employers, faculty and staff at the annual poster exhibition. Right: Students at the UCD Michael Smurfit Graduate Business School engage in learning both within and beyond the classroom, as we continuously redefine how business is taught to inspire the next generation of business leaders.

IRC Postdoctoral Fellowship Award for Professor Andreas Hoepner for the project, *Building Cleantech Finance and Innovation Ecosystems*. Professor Andy Prothero and Professor Donna Marshall won funding as part of the multi-million-euro *Beacon Project* – a collective university, research organisation and company project – to build a national bioeconomy hub for Ireland.

Other significant research collaborations with industry partners include projects in the area of anti-money laundering, with Enterprise Ireland funding awards for Dr Sha Liu with Accenture and Professor Cal Muckley with Fidelity Investment. Professor Mike O'Neill led a successful Science Foundation Ireland application for a project on *Sports Analytics Injury Prevention* with StatSports and LERO.

The College values its community of PhD and postdoctoral researchers and to that end launched a new PhD research centre in 2018. The purpose-built space allows for a stronger sense of community and consolidates the PhD programme on the Smurfit campus.

## Education and Student Experience

UCD College of Business was successful in its application for AACSB re-accreditation for a further five years. The oldest and largest accreditation body, AACSB commented on the clarity of the School's strategy and were highly complimentary of the ongoing progress.

UCD Michael Smurfit Graduate Business School has again ranked among the world's leading business schools. The Financial Times (FT)

awarded our Masters in Management programme (CEMS MiM) a ranking of 7th place globally, with the MSc in Finance ranked 36th. The College's Open Enrolment Executive Education programmes were ranked 48th globally.

Over the past two years, the School has begun to participate in the newly created QS Business Masters Rankings. The successes of our students and graduates are reflected in the high rankings obtained for individual programmes including the MSc in Business Analytics (13th place globally), MSc Marketing (15th place globally), MSc Finance (24th place globally) and Masters in Management (42nd place globally).

Our students also achieved international acclaim as five Executive MBA students from the UCD Smurfit School placed first in the John Molson MBA International Case Competition in Canada – the oldest and largest event of its kind. In this round-robin tournament, teams reviewed seven unpublished business cases and had three hours to develop and present solutions using skills and knowledge gained from their MBA programme. Coached by Professor of Strategic Management Patrick Gibbons, the championship team beat thirty-six schools to bring home the grand prize of \$10,000.

Closer to home, the annual Bachelor of Business Studies (BBS) Research Expo brought research to life for undergraduate students. The final-year students showcased their scholarly achievements to employers, faculty and staff at a poster exhibition.

We continued to welcome students from Singapore and Hong Kong as they joined the popular Centre for Distance Learning Summer School to experience two weeks in Dublin while completing two of their core modules. The initiative expanded in 2018 to include BBS students from Dublin and the BSc cohort from Sri Lanka.

UCD Smurfit Executive Development delivered the inaugural Smurfit Senior Leadership Programme, in collaboration with the University of Virginia's world-renowned Darden Executive Education, in Autumn 2018. The two-week residential experience in Dublin and Washington, meets the needs of international businesses based in Ireland who want to enhance the performance of top executives while advancing organisational priorities.

In looking to the future, we realise that our idea of work, who does it, and where and when it happens, is continually changing. A new wing of the Lochlann Quinn School of Business is focusing on the future of learning to complement the existing state-of-the-art facilities. The project includes a new interactive learning environment, digital collaboration rooms and multimedia e-learning suites. The new wing will open in 2019.

## Community

Our business alumni population has grown to over 84,000 members in over 100 countries, encompassing an engaged community of 40 international alumni chapters. The global activity for 2017/18 includes 12 business alumni events in locations ranging from the USA to Singapore.

In Dublin, we hosted the Business Alumni Awards Dinner and a record number of reunions totalling 11 on-campus events with over 650 attendees. The volume of events is a bold new step for the School and part of our strategy to increase engagement with younger alumni.

This year also saw the successful launch of the alumni mentoring programme with 758 business alumni volunteering as mentors. This programme will provide valued support to our current and future students in the development of their career plans.

## Engagement and Partnership

External networks provide a vital element of the College's infrastructure, including linkages with employers and other leading business schools. We work hard to engage with our external stakeholders and have a multiplicity of engagements with the business world encompassing internship and mentorship programmes, guest speakers from industry, company projects, and corporate-provided workshops. Year-on-year, we are increasing our focus on the experiential learning opportunities that these partnerships enable.

We continue to actively engage in peer business school networks including CEMS, GNAM and PIM. These networks allow us to offer student exchanges and joint programme offerings with leading international business schools. In December 2017, we were admitted to full membership of UNICON, a global consortium of business school-based organisations, whose members are the worldwide reference for executive education.

It is the dedication of our collective community that propels us forward as we educate and empower our students to create meaningful impact across the world of business.

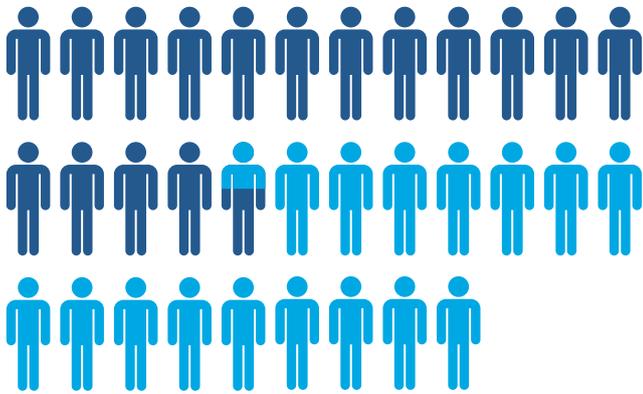


**Professor Anthony Brabazon**  
College Principal/Dean UCD College of Business

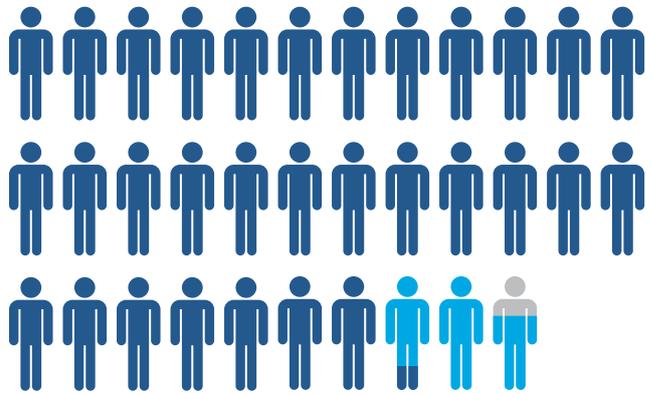


Opening in 2019, a new wing of the Lochlann Quinn School of Business will include an interactive learning environment, digital collaboration rooms and multimedia e-learning suites to complement the existing state-of-the-art facilities.

**3,301** Total students in Ireland



**3,365** Total students overseas



**1,659**  
Undergraduate students (FTE)

**1,642**  
Graduate students (FTE)

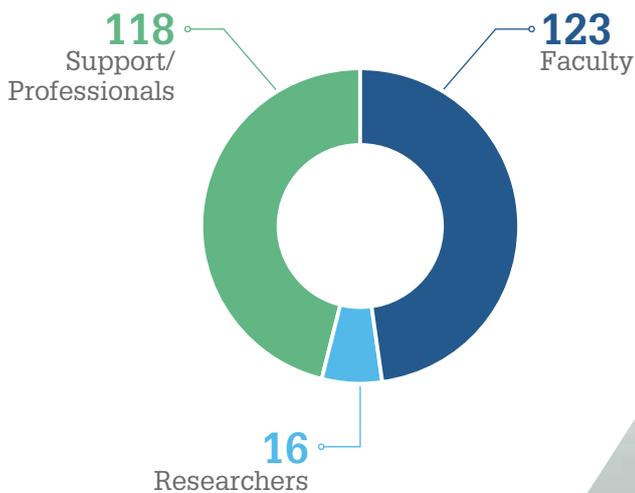
**3,121**  
Undergraduate students (FTE)

**244**  
Graduate students (FTE)

 = 100 people (approx.)

FTE = Full Time Equivalent

**257** Total staff (FTE)



**€3.64m**  
Research awards



The inaugural UCD Business London Dinner welcomed guest of honour, Francesca McDonagh, Group CEO Bank of Ireland, along with 150 alumni and friends living in London to a fantastic night of networking and celebration. Pictured: Prof Tony Brabazon; Francesca McDonagh, Group CEO Bank of Ireland; Niall FitzGerald KBE, Chair of the Irish Advisory Board; and Liam FitzGerald, Incoming Chair of the Irish Advisory Board.



Pictured: UCD President, Professor Andrew Deeks with honorary degree recipient Sir Ciarán Devane and Professor Eoin Casey, Head of UCD School of Chemical and Bioprocess Engineering.



**Professor  
David FitzPatrick**  
College Principal/  
Dean of Engineering

**Dean of Architecture**  
Professor Hugh Campbell

**Associate Dean of Architecture**  
Mr Dan Sudhershnan

**Vice Principal for Teaching  
and Learning**  
Associate Professor Amanda Gibney

**Vice Principal for Research,  
Innovation and Impact**  
Professor David Browne

# College of Engineering and Architecture

## Research, Innovation and Impact

I am delighted to report that 2017/18 was a record year for the College of Engineering and Architecture with over €30 million in new external research funding awarded to the College. This represents approximately 25% of the funding awarded to the University during the year and exceeds the College's preceding five-year average of €24.5 million p.a.

The College received significant funding from industry collaborative programmes, including over €10m through the Science Foundation Ireland (SFI) Research Centres Programme for I-Form, the SFI Research Centre for Advanced Manufacturing and the BEACON – Bioeconomy SFI Research Centre, both of which were established during the year.

I-Form is hosted in UCD and led by Professor Denis Dowling, UCD School of Mechanical and Materials Engineering. It involves many members of the College and the UCD School of Computer Science and is in partnership with seven other research institutions and over 30 industry partners. The I-Form mission is to shape the future of manufacturing through high-impact research into the application of digital technologies to materials processing.

BEACON, also hosted in UCD, is led by Professor Kevin O'Connor in UCD College of Science and involves Professors Nick Holden (Deputy Director) and Eoin Casey, and Associate Professor Eoin O'Neill from UCD College of Engineering and Architecture as Co-Investigators. BEACON is in partnership with four other research institutions and collaborates closely with industry across the agri-food and marine

sectors to convert residues and waste streams created during primary production processes to higher value products.

The College had significant success during the year with the prestigious SFI Investigators Programme and the SFI Career Development Award programme with five projects, totalling over €4.8 million being registered in the UCD School of Electrical and Electronic Engineering. The individual investigators leading their respective projects include Professors Anding Zhu, Michael Peter Kennedy, Robert Shorten, Andrew Keane and Dr Terence O'Donnell and Dr Le-Nam Tran. They are conducting research to address national research priorities in future networks and communications, data analytics, and smart grids and smart cities.

Members of the College also had excellent success across a range of other new funding programmes. Associate Professor Mark Flanagan in the UCD School of Electrical and Electronic Engineering, and Dr Sharon O'Rourke, School of Biosystems and Food Engineering, each received Laureate Programme Awards by the Irish Research Council which are aimed at funding exceptional researchers to conduct frontier research. Associate Professor Dieter Kogler, UCD School of Architecture, Planning and Environmental Policy was awarded €643k under the new SFI Science Research Policy Programme – this was one of only five projects awarded nationally. Professors Anding Zhu, UCD School of Electrical and Electronic Engineering, and Niall English, UCD School of Chemical and Bioprocess Engineering each received awards under the new SFI – International Partnership Programme with a combined total of almost €2 million. This new SFI programme was launched in 2017 in collaboration with the National Science

Foundation China (NSFC) and will develop collaborations of strategic relevance between the Republic of Ireland and the People's Republic of China.

Spin-out activity from the College continues to be strong as two new spin-out ventures emerging from the College were showcased at the 2017 UCD VentureLaunch Accelerator Programme. PlasmaBound, founded by Dr Nick Barry, UCD School of Mechanical and Materials Engineering and UCD School of Chemical and Bioprocess Engineering has patented technologies that enable composite manufacturers to build stronger and lighter composite assemblies – this removes the need for bolts when joining structural composites, thus eliminating associated mechanical and fatigue performance problems. Saragossa Software, founded by Michael Mescal, UCD School of Architecture, Planning and Environmental Policy, is developing next generation Building Information Modelling (BIM) software for architects, engineers and educators. The proprietary software combines 3D modelling, climate and physics simulation technologies with specific green building codes and certifications, in one system.

Other examples of the outputs and impact of the research and innovation carried out in the College are featured in a new portfolio of Impact Case Studies that were produced during 2017/18. They include two case studies that were winners in the UCD Research Impact Case Study Competition 2017: Associate Professor Kenneth Stanton for Closer to the sun – a mission critical spacecraft surface coating, and Dr Shane Keaveney and Colin Keogh of The Rapid Foundation – putting technology in the hands of people who need it.



2017 EGA Gold Medal Winners (l-r) : Adam Hermann, Electronic Engineering, Alan Smith, Engineering with Business, Margaret Tobin, Structural Engineering with Architecture, Daniel McLoughlin, Civil Engineering, Eoin Shankey, Mechanical Engineering, Deirdre Belton, Chemical Engineering, Hannah Craddock, Biomedical Engineering, Horea Catanase, Electrical Engineering and Kate O'Carroll, Architecture Graduates Association Medal.

**Graduate School Director**  
Associate Professor Kenneth Stanton

**UCD College of Engineering and Architecture consists of six schools**

**UCD School of Architecture, Planning and Environmental Policy**

**Head of School**  
Professor Peter Clinch  
(from 1 October 2017)

**UCD School of Biosystems and Food Engineering**

**Head of School**  
Professor Colm O'Donnell

**School of Chemical and Bioprocess Engineering**

**Head of School**  
Professor Eoin Casey

**School of Civil Engineering**

**Head of School**  
Associate Professor Aoife Ahern

**School of Electrical and Electronic Engineering**

**Head of School**  
Associate Professor Andrew Keane

**UCD School of Mechanical and Materials Engineering**

**Head of School**  
Professor Michael Gilchrist

As of September 2017



Dr Vincent Hargaden, Associate Professor in the UCD School of Mechanical and Materials Engineering, was awarded a University Teaching and Learning Excellence Award in recognition of his sustained commitment to teaching excellence and student learning. His teaching interests cover the mathematical aspects of Operations and Supply Chain Management, which includes modules in Supply Chain Design, Operations Strategy, Decision Analysis and Project Management. Vincent's research focuses on the design and optimisation of resilient supply chains and on engineering education.

Publication output from the College continues to have a high citation impact and faculty publish in high impact journals. A recent example is the publication entitled *Improved Photovoltaic Performance from Inorganic Perovskite Oxide Thin Films with Mixed Crystal Phases* which was published in high impact journal Nature Photonics in May 2018. The paper presents the findings of research carried out by Dr Mert Celikin of UCD School of Mechanical and Materials Engineering and his international collaborators at INRS, Energy Materials Telecommunications Research Centre and École de Technologie Supérieure in Canada, and the University of Electronic Science and Technology of China.

**Education and student experience**

I am delighted to confirm that our Master of Architecture programme has been given the designation of Substantial Equivalency by the National Architectural Accrediting Board, NAAB, in the United States. As a result, we are the only College in Ireland with triple professional accreditation/substantial equivalency from RIAI, RIBA and NAAB.

The College has progressed a number of collaborative programmes with international partners including Columbia University with regard to a dual masters degree in Civil Engineering and a joint degree with Chang'an University. Furthermore, the Beijing Dublin International College expanded its programme offering with a new BE Electronic and Information Engineering programme which commenced in September 2017.

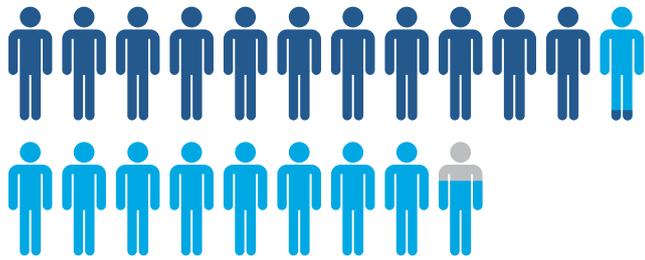
**Engagement and partnership**

This was a hugely significant year for Ireland and UCD at La Biennale di Venezia. For the first time ever, the overall curators were architects that live and work in Ireland: Yvonne Farrell and Shelley McNamara of Grafton Architects. Yvonne and Shelley are both UCD graduates, winners of a 2014 Alumni Award and they are currently Adjunct Associate Professors at the UCD School of Architecture.

UCD Engineering Graduates Association (EGA) events commenced in September 2017 with the EGA Gold Medal and Award Ceremony, at which EGA Gold Medals were presented to students excelling in their disciplines. In March 2018, the EGA hosted its first Engineering Diversity Workshop which sought to identify workable actions that the EGA can implement to promote gender balance in engineering within Schools, universities and the workplace. The annual Spring Lecture on 'The Changing Face of Engineering' took place in April 2018 and was led by Dr Dervilla Mitchell, Chair of UKMEA ARUP. In May 2018, the EGA travelled to Belfast to hold a highly topical workshop on 'Brexit; Engineering a Cross-Border Solution' as part of the UCD Engineering Nationwide series which seeks to connect with UCD engineering graduates based across the country.

**Professor David FitzPatrick**  
College Principal/Dean of Engineering

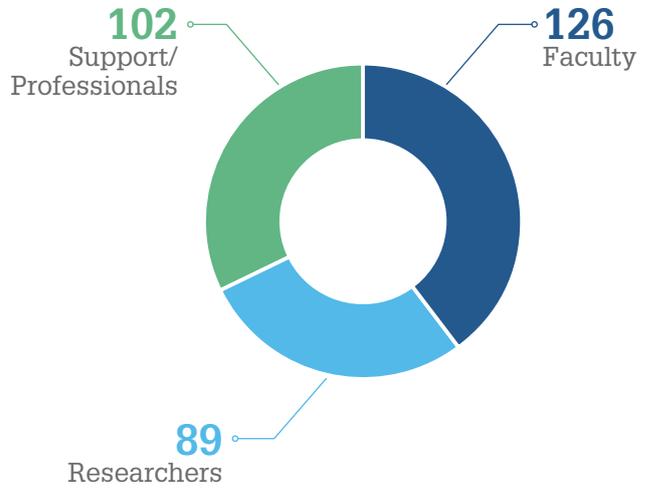
**2,056** Total students in Ireland



**1,109**  
Undergraduate students (FTE)

**947**  
Graduate students (FTE)

**317** Total staff (FTE)



**73** Total students overseas (Undergraduate FTE)

 = 100 people (approx.)

**€30.22m**   
Research awards



Left: Dr Andrés Velarde, the Rector of UPN, presents Professor Da-Wen Sun with the certificate, medal and plaque of the honorary doctorate of Universidad Privada del Norte (UPN), Peru in recognition of his exceptional contribution and leading role for advancing Food and Biosystems Engineering research and education at the global level. Right: 'Think Bigger' imagery utilised by UCD College of Engineering and Architecture.



Minister of Agriculture, Food and Marine, Michael Creed TD launches new UCD Bachelor of Agricultural Science degree programme entitled Food Business with Chinese Studies at the National Ploughing Championships in September 2017.



**College Principal**  
**Professor Cecily Kelleher**

**Associate Dean for Research, Innovation and Impact**  
Professor Helen Roche

**Associate Dean for Teaching and Learning**  
Dr Sue Rackard

**Associate Dean for Global Engagement**  
Associate Professor Pat Felle

# College of Health and Agricultural Sciences

In 2017/18 UCD College of Health and Agricultural Sciences entered its third year of operations and continued to embed its cross-cutting One Health theme, as well as developing an ambitious and overarching strategy.

The College groupings of Research, Innovation and Impact, Education and Training and Global Engagement continue to produce excellent work across the five constituent Schools to identify areas of synergy and shared best practice. A key development in the College this year has been the appointment of Professor Timothy Lynch as Vice Principal for Health Affairs, which will further strengthen the relationship with Ireland East Hospital Group and clinical partners in Health Sciences.

The five Schools in the College of Health and Agricultural Sciences pride themselves on their

international profile. The release of the QS World University Subject Rankings in February brought welcome news in particular for two of our Schools. Nursing at UCD was ranked 31st in the world subject rankings, and UCD Veterinary Science is now ranked 24th in the world. This places Veterinary Science as Ireland's highest ranked subject.

There have been several notable awards and accolades across the College. In the School of Agriculture and Food Science, Associate Professor Ronan Gormley was awarded the EFFoST Science to Society Award 2017. The award gives

recognition to individuals or organisations whose work has advanced understanding and appreciation of the value of food science and technology to society. John O’Loughlin Kennedy was also honoured by the School of Agriculture and Food Science with an honorary doctorate for his contribution to helping people affected by disaster. This marked the 50th anniversary of his co-founding Concern Worldwide in line with UCD’s major initiative to address global challenges.

In the School of Veterinary Medicine, Professor Grace Mulcahy was elected to the Royal Irish Academy in 2018 in recognition of her world-class contribution to science. Professor David Brayden, Professor of Advanced Drug Delivery at the School of Veterinary Medicine and the UCD Conway Institute, was elected to Fellowship status of the American Association of Pharmaceutical Scientists (APPS), a first for an Irish scientist. Dr Alison Reynolds won the inaugural UCD Allergan Innovation Award in recognition of the innovative potential within her research to develop a new therapy for dry eye disease.

In the School of Public Health, Physiotherapy and Sports Science, Associate Professor Brona Fullen has been elected as the next President of the European Pain Federation. Associate Professor

**// Nursing at UCD was ranked 31st in the world subject rankings, and UCD Veterinary Science is now ranked 24th in the world. This places Veterinary Science as Ireland’s highest ranked subject //**

Mary Codd was the recipient of the Universitas 21 International Teaching Excellence award.

On 5th December 2017, Patricia Rickard-Clarke was conferred with an Honorary Degree of Doctor of Science, the first proposed by UCD School of Nursing, Midwifery and Health Systems. Patricia has made an important contribution to legislative reform and healthcare practice transformation in Ireland.

Professor Kenneth Wolfe, UCD School of Medicine and UCD Conway Institute, Professor of Genomic Evolution has been awarded a European Research Council Advanced Grant for the second time in his career. He is the first ever Ireland-based researcher to receive two of the highly sought after research funding awards. Congratulations also go to Dr Jonathan McNulty who was unanimously elected as President of the European Federation of Radiographer Societies. Dr Tom Wall received the College of Anaesthetists of Ireland (CAI) Anaesthetic Research Fellowship for his presentation on The Effect of Anaesthetic Agents on Metastasis in a Mouse Model of Breast Cancer, which won the research group a Scholarship prize of €25,000.

In terms of wider engagement, University of California, Davis (UC Davis) is a key international partner for UCD, with a joint ‘UCD2’ MoU signed between the two universities in 2014 to develop education, research, innovation and cultural links. Through funding provided by Zoetis, we are now in a position to deepen our interactions with UC Davis through the creation of a Transatlantic One Health Alliance. Our aim is to develop a world-leading collaboration delivering innovative, outstanding research and training to address global needs and challenges. We will achieve this through collaborative research, training and education to deliver innovative solutions and provide the science base to underpin policy formulation in the One Health area. November 2018 will see the launch of this initiative with a meeting



Professor Mark Rogers (Registrar & Deputy President), Professor Cecily Kelleher and Professor Michael Doherty are introduced to some small animal surgical skills at the launch of the UCD Veterinary Clinical Skills Centre.

## Health and Agricultural Sciences

Left: Professor Giuseppe De Vito, Head of School, Public Health, Physiotherapy and Sports Science, speaking at the closing ceremony of the 23rd Annual Congress of the European College of Sport Science.

Centre: At the launch of the national Advanced Nurse Practitioner programme were (l-r): Dr Maura Dowling, NUIG, Prof Anne-Marie Brady, TCD, Simon Harris TD, Prof Eileen Savage, UCC, and Prof Gerard Fealy, UCD.

Right: 'Think Bigger' imagery utilised by UCD School of Agriculture and Food Science.



### UCD College of Health and Agricultural Sciences consists of five schools

#### School of Agriculture and Food Science

Head of School  
Professor Alexander Evans

#### School of Medicine

Head of School  
Professor Patrick Murray

#### School of Nursing, Midwifery and Health Systems

Head of School  
Professor Gerald Fealy

#### School of Public Health, Physiotherapy and Sports Science

Head of School  
Professor Giuseppe De Vito

#### School of Veterinary Medicine

Head of School  
Professor Michael Doherty

As of September 2017

at UC Davis and a symposium to mark World One Health Day.

In July 2018, UCD hosted the 23rd annual congress of the European College of Sports Sciences at the Convention Centre Dublin, one of the largest events of its kind worldwide. Local presidents for the congress, Professors Colin Boreham and Giuseppe de Vito of the School of Public Health, Physiotherapy and Sports Science welcomed 3,000 delegates from 71 countries to hear the latest developments in the fields of exercise and health, sports performance and sports technology. Co-hosted with Ulster University, the congress was opened by Professor Joe Carthy and included a reception for delegates in the UCD O'Brien Centre for Science and an early morning fun run around the campus. The event was supported by numerous faculty, staff and students, Fáilte Ireland and Science Foundation Ireland.

Patients with Cystic Fibrosis at St Vincent's University Hospital took part in a randomised double-blind placebo-controlled phase 3 crossover clinical trial to evaluate the efficacy and safety of Ivacaftor alone and in combination with Tezacaftor, a CF transmembrane conductance regulator. The study, published in the New England Journal of Medicine, examined a cohort of patients with cystic fibrosis with a specific gene mutation. Professor Edward McKone, consultant in respiratory medicine and UCD Clinical Professor, School of Medicine, believes that these combination therapies will extend the number of patients who can benefit from modulator therapies.

In the College of Health and Agricultural Sciences, our programmes are constantly developing. In conjunction with the School of Agriculture and

Food Science, Minister of Agriculture, Food and Marine, Michael Creed TD launched a new UCD Bachelor of Agricultural Science degree programme entitled Food Business with Chinese. The Food Business with Chinese Studies programme reflects the changing market landscape and aims to develop graduates with the skills and talent urgently required by the Irish food industry. With Brexit and the uncertainty involving the UK market, export expansion to the emerging markets has critical strategic importance to the Irish food industry and the overall economy. The programme brings together the established expertise in the UCD School of Agriculture and Food Science and UCD Institute of Chinese Studies.

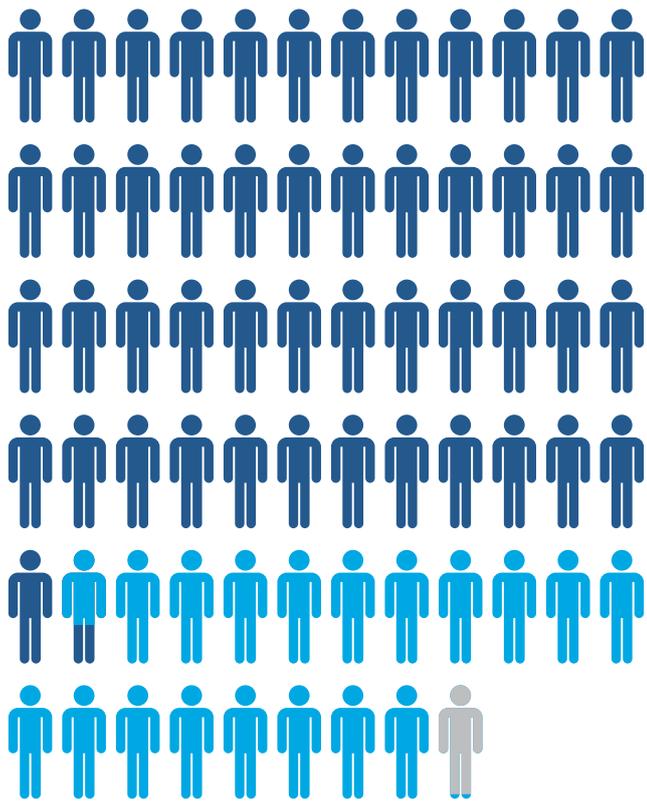
The UCD School of Nursing, Midwifery and Health Systems entered a consortium arrangement with UCC, TCD and NUIG to develop and deliver a new national MSc in Advanced Practice programme on behalf of the Department of Health. The Minister for Health, Simon Harris TD launched the programme at an event hosted by the School in November 2017. Minister Harris thanked the consortium partners for working with the health services in delivering a programme aimed at preparing advanced practitioners to lead and support the health services transformation agenda.

This year has been a landmark year for the College and I am certain next year will be the same as our focus on strategy intensifies.

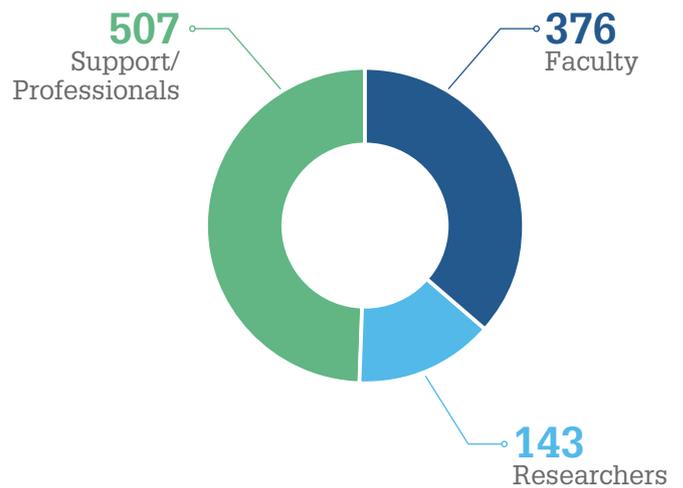
**Professor Cecily Kelleher**  
College Principal



**6,804** Total students in Ireland



**1,026** Total staff (FTE)



**4,934**  
Undergraduate students (FTE)

**1,870**  
Graduate students (FTE)

= 100 people (approx.)

**€36.02m** Research awards



Prolego Scientific, an early-stage enterprise won the UCD Start-Up of the Year Award and a €20,000 prize after being declared overall winner of the UCD VentureLaunch Accelerator Programme. Pictured are the founders of Prolego Scientific, a UCD School of Mathematics and Statistics start-up, are Associate Professor Andrew Parnell, Dr Belinda Hernández and Dr Mahdi Aminam.



**Professor Joe Carthy**  
College Principal/Dean

**Associate Deans**

**Associate Dean of Science**  
Assoc Professor Evelyn Doyle

**Associate Dean for International Study (North America)**  
Dr Jennifer Mitchell

**Associate Dean for Widening Participation**  
Assoc Professor John O'Connor

**Vice-Principal International**  
Professor Jeremy Simpson

# College of Science

I am pleased to report that UCD College of Science enjoyed a successful 2017/18. During this period we grew our educational activities, attracted major research funding and continued to engage with partners and the community.

We introduced a new Transition Year series of workshops in February 2018 and 154 students from 76 schools across 16 counties attended these hands-on sessions in areas including chemistry, earth science, astronomy & space science, plant biology, mathematics and microbiology. The programme also included a workshop on STEM careers to highlight the opportunities across a range of science disciplines and to help students begin the process of mapping degrees to job opportunities.

UCD's flagship course, Science DN200, remained the most competitive common entry science course in the country and continues to offer the most diverse range of subjects. In addition, Computer Science DN201 and Actuarial and Financial Studies DN230 are also the most competitive courses in their respective areas. Overall the science programme continues to widen participation with 20% of students from the HEAR, DARE, FET/QQI and mature student

routes. It has also been a very successful year in increasing non-EU international students with significant increases at both taught graduate and undergraduate levels.

## Research and Impact

This year has again been a very successful year in terms of funding achieved and scientific impact, despite the continuing difficulties in the national funding landscape. We are continually building on our foundations of excellent and important research delivering answers to challenges of global significance. Of particular relevance to this, was the Irish Bioeconomy Foundation (BEACON) led by Professor Kevin O'Connor, School of Biomolecular and Biomedical Science, and colleagues receiving Enterprise Ireland funding of €4.6 million to develop a new Bioeconomy Innovation and Piloting Facility at Lisheen, Co Tipperary.

We are also actively participating in the national dialogue for the design and content of Horizon Europe and to facilitate this, on 4 May 2018 the College organised a half-day information meeting: *The Sustainable Development Goals, the Universities and FP9*, our speaker being Professor Patrick Paul Walsh, Chair of International Development Studies in UCD School of Politics and International Relations, and Senior Advisor to the UN Sustainable Development Solutions Network.

Another significant achievement this year was the Insight Centre for Data Analytics' launch of a new and collaborative €4 million artificial intelligence (AI) research project with Samsung Electronics Co Ltd. The 3-year research project will be led by Professor Barry Smyth, Dr Aonghus Lawlor and Associate Professor Neil Hurley and will involve a team of over 25 researchers and highly-skilled staff from Samsung and UCD, and will result in the establishment of 12 new research posts at UCD.

I am also delighted to report that a world-leading economic geologist, Professor Murray Hitzman has been announced as SFI Research Professor at UCD and as the new director of iCRAG, Irish Centre for Research in Applied Geosciences based in the College of Science. Professor Hitzman will lead a new €4.7 million research professorship programme at the School of Earth Sciences, supported by Science Foundation Ireland. The programme will employ 16 researchers over five years, and is focused on studying the geology, geochemistry and geophysical signature of mineral deposits in the Irish zinc-lead orfield and other mineral systems across Europe and Africa.

Two science faculty members, Associate Professor Sheila McBreen and Professor Brian Rodriguez, both from the UCD School of Physics, have

Left: Minister Mary Mitchel O'Connor TD and Vice President for Research, Innovation and Impact Prof Orla Feely with a plaque commemorating the centenary of Prof Sheila Tinney's birth. Prof Tinney was the first Irish woman to receive a PhD in mathematics, one of the first female members of the RIA, a fellow of DIAS and a lecturer in UCD. Also pictured are (l-r) Hugh Tinney, Dr Isabella Gollini, Dr Sandra Collins (Director of the National Library), Etna Tinney, Dr Aoibhinn Ní Shúilleabháin and Prof Brendan Murphy (Head of UCD School of Mathematics and Statistics).

been awarded more than €1.4 million in research funding through the Science Foundation Ireland (SFI) Career Development Award Programme. Minister of State for Training, Skills and Innovation, John Halligan TD, who announced the funding, described the awardees as "the future leaders of research and innovation in Ireland".

I am also delighted to announce that two colleagues in the College of Science were awarded inaugural Irish Research Council frontier grants. This is funding to support "daring" research that "pushes boundaries" and has been awarded to ten academics at UCD. In the College of Science, Professor Emma Teeling, School of Biology and Environmental Science, was the recipient of a Consolidator Laureate Award for *AGE IMMUNE: The evolution and molecular basis of exceptional ageing and immunity in mammals*. The recipient of a Starting Laureate Award was Dr Colm Ryan, UCD School of Computer Science for *The contribution of paralog buffering to tumour robustness*.

Our research success is also highlighted in the continuing development of campus based companies, with ATXA Therapeutics, which was founded by Professor Therese Kinsella, School of Biomolecular and Biomedical Science, securing €2.5 million in Horizon 2020 SME Funding.

Professor Kevin O'Connor, UCD School of Biomolecular and Biomedical Science has launched Nova Mentis, a subsidiary company of the NovaUCD spin out company Bioplastech. Nova Mentis specialises in the production of natural and pure hydroxytyrosol which is a potent antioxidant for use in food, nutraceutical, cosmetic and pharmaceutical sectors.

Our colleagues in the School of Mathematics and Statistics have also been successful in winning funding from SFI under the SFI Discover

Right: Over 150 people from academia and industry attended the 16th Annual CSCB Symposium 'Recent Advances in Synthesis and Chemical Biology', held in UCD in December. Five internationally renowned scientists Professors Martin Smith (University of Oxford), Steve Davies, (University of Oxford), Alison Hulme (University of Edinburgh), Don Hilvert (ETH Zurich) and Larry Que (University of Minnesota) delivered plenary lectures across the breadth of synthetic chemistry and chemical biology. Pictured are: Prof Martin Smith, Prof Steve Davies, Prof Alison Hulme, Prof Pat Guiry (Director, CSCB), Prof Don Hilvert, and Prof Larry Que.



**Vice-Principal for Research and Innovation**

Professor Fiona Doohan

**Vice-Principal for Teaching and Learning**

Assoc Professor Carmel Hensey

**Director of Graduate School**

Assoc Professor Emma Sokell

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

**School of Biology and Environmental Science**

Head of School

Professor Jeremy Simpson

**School of Biomolecular and Biomedical Science**

Head of School

Professor Wim Meijer

**School of Chemistry**

Head of School

Professor Gareth Redmond

**School of Computer Science**

Head of School

Professor Pádraig Cunningham

**School of Earth Sciences**

Head of School

Professor Frank McDermott

**School of Mathematics and Statistics**

Head of School

Professor Brendan Murphy

**School of Physics**

Head of School

Professor Martin Grunewald

As of September 2017

Programme for *Maths Sparks: Problem Solving Workshops*. This is a series of mathematics workshops for senior post-primary (Transition and 5th year) pupils from DEIS schools, which will be designed and presented by undergraduate STEM students. This programme is led by Dr Aoibhinn ní Shúilleabháin.

I am also delighted to announce the recent successful completion of phase one of the EIRSAT-1 (Educational Irish Research Satellite 1) programme as it has successfully completed the European Space Agency's design review. EIRSAT-1 is a student-led initiative to design, build, launch and operate Ireland's first satellite, which is overseen by Professor Lorraine Hanlon and Associate Professor Sheila McBreen, UCD School of Physics.

I would like to congratulate faculty from the College on their significant funding achievements.

**Research Award Highlights**

- Professor John Walsh, UCD School of Earth Sciences was awarded a Gold Medal for the Environmental Sciences and Geosciences by the Royal Irish Academy for his outstanding contribution to geology.
- Professor William Gallagher, UCD School of Biomolecular and Biomedical Science and Director Irish Cancer Society's Collaborative Cancer Research Centre BREAST-PREDICT, was honoured by the Royal Academy of Medicine in Ireland, receiving three awards for his research papers, in the Oncology, Dermatology and Biomedical Sciences categories.
- Associate Professor Robert Osburn, School of Mathematics and Statistics has been awarded the prestigious 2018 James M. Flaherty Visiting Professorship by the Ireland Canada University Foundation (ICUF).
- Dr Andrew Hines, UCD School of Computer Science, was awarded the 2018 US-Ireland Research Innovation Award for an Irish Higher Education Institute or Research Centre with US corporate for the development of ViSQOL which is a software platform for evaluating audio quality on the web by 'looking' at sounds.
- Professor Stephen Gardiner of the School of Mathematics and Statistics was elected Treasurer of the Royal Irish Academy in March 2018.

**Teaching and Learning**

An increasing number of College of Science faculty are engaging with professional programmes in university teaching and learning, providing opportunities to review and improve their teaching skills and understanding of approaches

and theories in effective higher education. This year faculty were conferred with a range of qualifications with seven faculty receiving the Professional Diploma, five receiving the Professional Certificate and six receiving the Certificate of Continuing Professional Development. This brings to 53 the number of Science faculty conferred with such awards in the past three years, significantly adding to the number of teaching and learning qualified faculty across our seven schools.

In line with the UCD Career Development and Employability Strategy we introduced a number of new modules to enhance and develop employability attributes and transferable skills in our students. These include professional placements and internships offered through modules such as Biomolecular Industry Research Project (BMOL40200), Data Science Industry Internship (COMP30790), Professional Placement-Science (SCI30080) and Work Placement Geoscience (GEOL30360).

The national Women in Maths in Ireland conference was held in UCD. Minister Mary Mitchell O'Connor TD opened the conference with a celebration of Professor Sheila Tinney and a plaque will be unveiled in the College of Science representing the centenary of her birth.

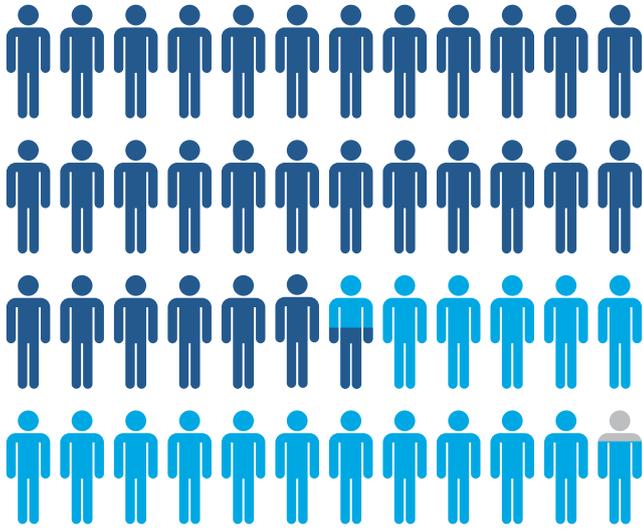
**Global Engagement**

The College has had a busy year in terms of its Global Engagement activities. In addition to welcoming incoming delegations from several key partner universities from continental Europe, China, Asia-Pacific and the USA, College of Science faculty have also been active across the globe raising awareness of its own research activities. Notably this year has seen more than 30 faculty-led visits to high schools in China, Thailand, Malaysia, India, Dubai and the USA. These visits have all included the delivery of mini-lectures, with the aim of inspiring these students to consider a scientific career and to become the next generation solving key problems in the world. The spread of nationalities of students studying programmes in science has never been greater, with more than 800 students from 70 different countries registered to our programmes.

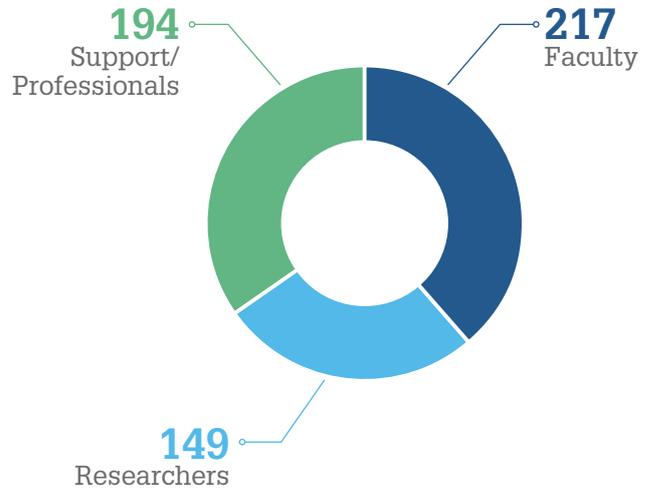


**Professor Joe Carthy**  
College Principal/Dean

**4,773** Total students in Ireland



**560** Total staff (FTE)

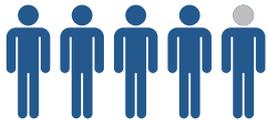


**3,054**  
Undergraduate students (FTE)

**1,719**  
Graduate students (FTE)

**€37.6m**   
Research awards

**480** Total students overseas (Undergraduate FTE)



 = 100 people (approx.)



'Think Bigger' imagery utilised by UCD College of Science.



Pictured at the inaugural Irish Young Philosophers Awards ceremony in O'Reilly Hall, (l-r) Dr Áine Mahon, UCD School of Education, Mrs Sabina Higgins, Prof Rowland Stout, UCD School of Philosophy, President Michael D Higgins, Prof Sally Haslanger, Massachusetts Institute of Technology, Prof Mark Rogers, UCD Registrar and Deputy President, Dr Danielle Petherbridge, UCD School of Philosophy and Prof Colin Scott.



**College Principal/Dean  
Professor Colin Scott**

**Associate Dean of Social Sciences**  
Associate Professor Sara O'Sullivan

**Vice-Principal for Research,  
Innovation and Impact**  
Professor Alun Jones

**Vice-Principal for Teaching  
and Learning**  
Professor Eilis Hennessy

**Vice-Principal for Global  
Engagement**  
Dr Richard Collins

**Director of Graduate School and  
Vice Principal for Graduate Studies**  
Professor Enda Murphy

# College of Social Sciences and Law

UCD College of Social Sciences and Law enjoyed a very successful year over 2017/18. The new four year Social Sciences Degree programme was successfully launched, we grew our educational activities more generally, attracted major research funding and continued to engage with partners and the community.

The College received outstanding recognition with Archaeology, Geography, Law, Development Studies, Social Policy and Administration and Philosophy at UCD listed in the QS World University Rankings as among top 100 in the world.

The College continues to work to enhance the support it gives to its constituent schools in developing and implementing their ambitions. A key aspect of this is measures to recruit, retain and support academic faculty. A new pilot development programme for newly appointed assistant professors was launched in early May in conjunction with the College of Science. It was designed to align with existing formal and informal policies and processes with mentoring being a crucial component of the programme.

## Education and Student Experience

A major reconfiguration of Social Sciences undergraduate education at UCD, led by Associate Dean, Associate Professor Sara O'Sullivan, saw the launch of the new flagship Social Sciences Programme, offering new combinations in a four-year structure, oriented around outcomes-based learning and with a strong focus on experiential learning and stronger research opportunities. The College team and Schools engaged extensively with the community of potential applicants to inform them of the new opportunities created by the changes, with over 2,700 students attending presentations on the new programme during UCD events and school and further education college visits.

The Social Sciences Programme Board also saw major changes this year and was expanded to include the single major programmes in economics and psychology, the BSc Financial Economics and the redesigned Access to Arts, Humanities, Social Sciences and Law Level 6 Diploma. To support these two major developments a new Social Sciences Office and website was launched in July 2018 to support students taking our programmes. A number of important new initiatives aimed at both engaging and supporting students were launched including the introduction of academic mentoring for all students on the BSc Social Sciences degree programme to provide ongoing academic advice during their undergraduate degree. Separately the 'students as partners' working group was established and chaired by Associate Professor Niamh Moore (School of Geography) with the main goal of this initiative to tackle important issues around student engagement and identity. Under the leadership of the chair of the Widening Participation Committee, Associate Professor Aideen Quilty (UCD School of Social Policy, Social Work and Social Justice) there have been major successes in widening participation routes into Social Sciences Programmes. The first College FET/QQI open day was held in January to promote our improved FET/QQI routes into programmes. There have also been important changes to mature entry routes.

## Supporting Teaching and Learning

During the year Vice-Principal for Teaching and Learning, Professor Eilis Hennessy provided important leadership on enhancing our teaching and learning environment in the context of new undergraduate programmes and more broadly, while also ensuring strong development opportunities and recognition of achievements. With the College Graduate School, Vice-Principal for Graduate Studies, Professor Enda Murphy led both on enhancing the regulatory and governance environment for graduate study and also on a number of significant programme innovations and enhancements, including the approval of new programmes in Public Administration in Development Practice and Demography at a time when we have continued to recruit larger numbers of graduate students year on year.

Left: IRC and ERC grant recipients from the College of Social Sciences and Law: (l-r): Prof Colin Scott, Assoc Prof Dragos-Gheorghe Calma, Asst Prof Jessica Smyth, Asst Prof Dawn Walsh, Assoc Prof Samuel Brazys and Assoc Prof Barry Molloy.



During the 2017/18 academic year the College developed a support model for tutors and demonstrators acknowledging the significance of their teaching role within their respective schools and allowed them to make the most of the experience that this role has given them. This involved collaboration with UCD Teaching and Learning and the Centre for Career Development in order to ensure excellence in the quality of the teaching provided by tutors and demonstrators. In conjunction with the College of Arts and Humanities, the College organised lunchtime teaching and learning events to encourage peer support of teaching activities. This year the focus was on integrating research into the curriculum and on innovative approaches to assessment.

## Research, Innovation and Impact

Research in the UCD College of Social Sciences and Law enjoyed tremendous success this past year with significant growth in activity and publication. More than €10 million in new grants was registered in 2017/18, an increase in value of nearly 70% over the previous year. Researchers received prestigious funding awards, hosted inspiring seminar and conference speakers and achieved meaningful research impact through publication and engagement over their research. I am extremely grateful to outgoing Vice-Principal for Research, Innovation and Impact, Professor Alun Jones who significantly enhanced the targeting of financial and other supports for research, ranging from important small projects to seeking of funding for larger projects.

Major grants from the Irish Research Council and the European Research Council illustrate the ambition of researchers at the College. Achieving an unprecedented number of large research grants is both a reflection and recognition of the calibre of researchers at the College. Key awards included: Assistant Professor Jessica Smyth, UCD School of Archaeology, Irish Research Council's Consolidator Laureate Award for *Passage Tomb People: investigating the social drivers of passage tomb construction*; Two researchers from the UCD School of Politics and International Relations were recipients of the Irish Research Council's Starting Laureate Award, Assistant Professor Dawn Walsh, *Independent commissions and*

Right: Prof Colin Scott presenting the UCD Social Sciences Award at the BT Young Scientist and Technology Exhibition 2018 to Susie Gill, Sarah Kelly and Adrianne Ward from Loreto College, Stephen's Green, Dublin 2 for their project titled 'Let Science Influence The Voting Age' in the Social and Behavioural Sciences Category.



## UCD College of Social Sciences and Law consists of 11 Schools

### UCD School of Archaeology

Head of School

Professor Graeme Warren

### UCD School of Economics

Head of School

Professor Karl Whelan

### UCD School of Education

Head of School

Professor Dymrna Devine

### UCD School of Geography

Head of School

Associate Professor Gerald Mills

### UCD School of Information and Communication Studies

Head of School

Professor Kalpana Shankar

### UCD School of Law

Head of School

Professor Imelda Maher

### UCD School of Philosophy

Head of School

Professor Maria Baghramian

### UCD School of Politics and International Relations

Head of School

Professor David Farrell

### UCD School of Psychology

Head of School

Professor Alan Carr

### UCD School of Social Policy, Social Work and Social Justice

Head of School

Professor Michelle Norris

### UCD School of Sociology

Head of School

Associate Professor Iarfhlaith Watson

As of September 2017

*power-sharing in post-conflict societies* and Associate Professor Samuel Brazys, *Trade-related Assistance for Development. Evidence from Micro-Level Evaluations*; Associate Professor Barry Molloy, UCD School of Archaeology, European Research Council Consolidator Grant, from the European Commission Horizon 2020 Programme for the project: *The Fall of 1200BC: The role of migration and conflict in social crises at end of the Bronze Age in South-eastern Europe (THE FALL)*.

Associate Professor Dragos Calma joined the UCD School of Philosophy from Clare College, Cambridge with a prestigious European Research Council (ERC) Starter Grant of €1,992,643 (2018-2023) for the project on *Neoplatonism and Abrahamic Traditions*. The grant will enable Dr Calma and his team of researchers in UCD to show the ways in which ideas drawing from the Pagan Hellenic philosophical school of Neoplatonism (in particular a fifth century text by Proclus called *Elements of Theology*) influenced the history of rationality in the Abrahamic traditions (Judaism, Christianity and Islam).

We were very pleased that responsibility for the Irish component of the European Social Survey (Round 9) returned to UCD with an IRC award under the leadership of Professor Philip O'Connell, UCD Geary Institute for Public Policy with Assistant Professor Mathew Creighton, UCD School of Sociology, Assistant Professor Micheál Collins, UCD School of Social Policy, Social Work and Social Justice and Ms Susan Butler, UCD Geary Institute for Public Policy. Other major grants awarded in the College during the year included a large award from Science Foundation Ireland for a project on The Peer Review Process to a team led by Professor Kalpana Shankar, UCD School of Information and Communication Studies.

Professor Suzanne Kingston, UCD Sutherland School of Law, received a European Commission Horizon 2020 Outstanding Achievement Award in the European Research Council Starting Grant category for project entitled *The Influence of New Environmental Governance Rules on Environmental Compliance*.

The first annual conference of the UCD Centre for Gender, Feminisms and Sexualities took place during the year and it was great to see such a substantial programme in the first year addressing issues of gender justice. The Centre is led by Ursula Barry, UCD School of Social Policy, Social Work and Social Justice and Dr Anne Mulhall, UCD School of English, Drama and Film, and exemplifies the drawing in of a wide range of disciplines and schools from across UCD.

In the area of impact, academics have been closely involved in designing and implementing the measures which have made Ireland a world leader in establishing processes of deliberative democracy through 'mini-publics'. Professor David Farrell, UCD School of Politics and International Relations has been central to this research. This work culminated in the establishment of the Constitutional Convention and then the Citizens' Assembly each of which supported highly informed deliberation over constitutional reform across a number of different fora, as with the referendum on the repeal of the 8th Amendment in 2018. Another research impact success has been that of Dr Niamh Howlin, UCD School of Law, whose work on the trial of Myles Joyce in November 1882 contributed to a Presidential pardon in respect of the Maamtrasna Murders.

## Engagement

Global engagement in the College is led by Vice-Principal, Dr Richard Collins and as part of the School of Law's commitment to international engagement, Dr Collins was a visiting scholar to the University of Sydney Centre of International Law during 2017/18.

Our alumni are an important asset and we are always looking at fostering deeper lasting relationships. In March the College hosted an International Women's Day event in conjunction with UCD Alumni Relations, launching specially commissioned videos which featured the impact of our alumni working in a variety of public and private sectors as well as members of our UCD community. Our Alumni were honoured at the 2017 UCD Alumni Awards ceremony with the Social Sciences Alumni Award presented to Mary Sutton who has spent much of her career in supporting human development and the Law Alumni Award presented to human rights lawyer Caoilfhionn Gallagher QC. A testament to the strong ties with law graduates was shown during the year when the Sutherland School of Law hosted a milestone reunion for the classes of 2007, 1997, 1987 and 1977 and which was the largest reunion hosted to date with over 240 alumni in attendance.

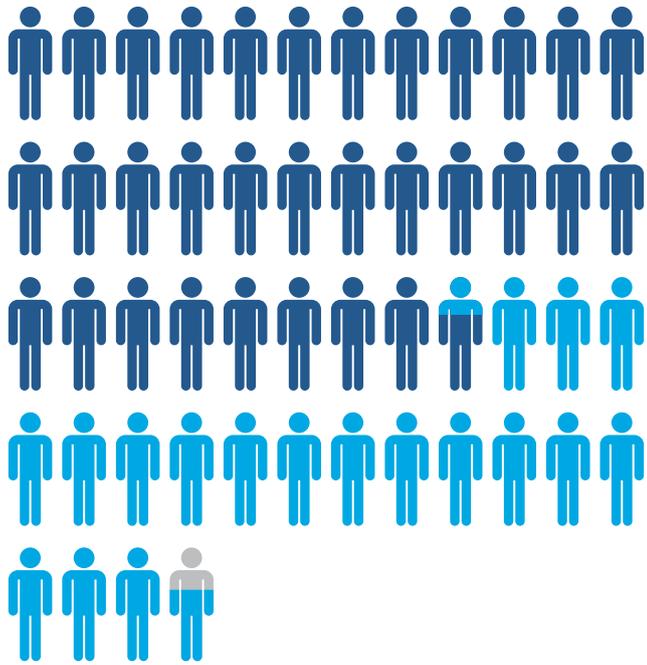


**Professor Colin Scott**  
College Principal



Left: Pictured at the 2018 VV Giri Lecture in the Sutherland School of Law on May 23rd, 2018 are: (l-r) Prof Colin Scott, College Principal; HE Mrs Vijay Thakur Singh, Indian Ambassador; Professor Jyoti Atwal, Jawaharlal Nehru University, New Delhi; and Professor Imelda Maher, Dean of Law. Right: 'Think Bigger' imagery utilised by UCD College of Social Sciences and Law

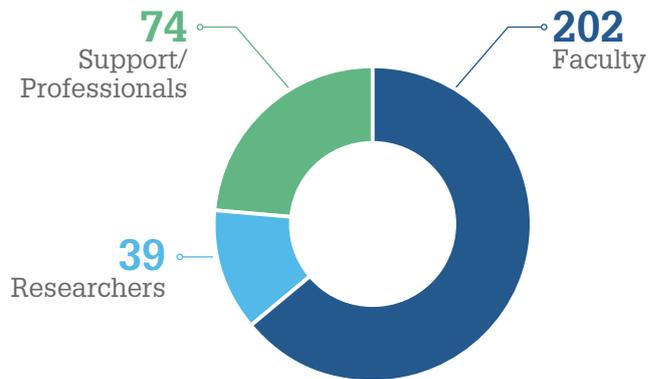
**5,513** Total students in Ireland



**136** Total students overseas (Undergraduate FTE)



**315** Total staff (FTE)



**3,267**  
Undergraduate students (FTE)

**1,886**  
Graduate students (FTE)

 = 100 people (approx.)

**€10.66m**   
Research awards



# University Awards

## Alumni Award Winners



L-r: Professor Andrew J Deeks, Caoilfhionn Gallagher, Professor Imelda Maher.

### **Caoilfhionn Gallagher QC, UCD Alumni Award in Law**

London-based human rights lawyer Caoilfhionn Gallagher was made Queen's Counsel in 2017 in recognition of her exceptional international work, acting for journalists and peaceful protestors who have been arbitrarily detained all over the world.



L-r: Professor Andrew J Deeks, Dr Des Rice, Professor Michael Doherty.

### **Dr Des Rice OBE, UCD Alumni Award in Agriculture and Veterinary Science**

Dr Des Rice is a veterinarian who specialised in livestock nutrition. After 2 years in veterinary practice in Ireland, he spent 4 years developing a Veterinary Investigation Laboratory in El Salvador. Dr Rice then focused on nutritional-disease research in Belfast for 10 years, obtaining a PhD.



L-r: Professor Andrew J Deeks, Dr Garret FitzGerald, Professor Orla Feely.

**Dr Garret FitzGerald, UCD Alumni Award in Research, Innovation and Impact**

Dr. Garret FitzGerald is the McNeil Professor in Translational Medicine and Therapeutics at the University of Pennsylvania in Philadelphia, where he chairs the Department of Systems Pharmacology and Translational Therapeutics and directs the Institute for Translational Medicine and Therapeutics.



L-r: Professor Andrew J Deeks, Dr Sheila Willis, Professor Joe Carthy.

**Dr Sheila Willis, UCD Alumni Award in Science**

Previously Director General of Forensic Science Ireland Dr Willis' career has focused on how science can be used to investigate crime and assist the administration of justice. She was director of the laboratory from 2002 to 2016 and has taken the organisation to the highest international standard.



L-r: President Andrew J Deeks, Eamonn Sinnott, Professor Tony Brabazon.

**Eamonn Sinnott, UCD Alumni Award in Business**

Eamonn Sinnott is Vice President, Technology and Manufacturing Group at Intel Corporation and the General Manager of Intel in Ireland. Joining Intel in 1991, he has held a variety of management positions in Ireland and in the USA prior to his appointment as General Manager of Intel Ireland in 2010.



L-r: Professor Andrew J Deeks, Emily Logan.

**Emily Logan, UCD Alumni Award in Health Sciences**

Emily Logan is the first Chief Commissioner of the Irish Human Rights and Equality Commission, appointed by President Michael D Higgins in 2014. In this role, Emily leads the IHREC in driving Ireland's human rights agenda to place Ireland on a global stage.



L-r: Professor Andrew J Deeks, Mary Sutton, Professor Colin Scott.

**Mary Sutton, UCD Alumni Award in Social Sciences**

Mary Sutton completed a Bachelor of Social Science degree in UCD in 1974 followed by a Master's degree in Economics at McMaster University in Canada. For most of her career, she worked in international development, initially as a researcher with the Irish Commission for Justice and Peace in Dublin and then with the Overseas Development Institute in London.



L-r: Professor Andrew J Deeks, Michael McGlynn, Professor Sarah Prescott.

**Michael McGlynn, UCD Alumni Award in Arts and Humanities**

Michael McGlynn is a composer and Artistic Director of the vocal ensemble Anúna which he founded in 1987. Ireland has no indigenous history of choral music, and he created Anúna with the intent of developing a uniquely Irish form of ensemble singing that wove convincing connections between the ancient singing traditions of this country and the literature of his homeland.



L-r: Professor Andrew J Deeks, Paul O'Donovan, Brian Mullins.

**Paul O'Donovan, UCD Alumni Award in Sport**

Our youngest Alumni Award winner ever, Paul, 23, is a world-class sportsman and the only Irishman to win both World Championship and Olympic medals in the same year. With his brother Gary, he won silver in the Men's Lightweight Double Sculls at the 2016 Rio Olympics.



Professor Andrew J Deeks, Professor Edmond Harty, Professor David FitzPatrick.

**Prof Edmond Harty, UCD Alumni Award in Engineering and Architecture**

Edmond Harty is the CEO and technical director of Dairymaster. Dr Harty has a strong background in engineering and science and is regarded as one of the world's pioneers in agricultural technology. He has an impressive track record of combining leading research with successful commercialisation of the resulting intellectual property.

## Ulysses Medals



**Baroness Onora O'Neill**

In recognition of her outstanding contribution to Philosophy.



**Professor Samantha Power and Professor Cass Sunstein**

Professor Samantha Power: In recognition of her outstanding contribution to Diplomacy and Professor Cass Sunstein: In recognition of his outstanding contribution to Law.



**Margaret Atwood**

In recognition of her outstanding contribution to Literature.

## Honorary Degrees



**Niall McLaughlin, Honorary Degree of Doctor of Literature**

Distinction in the field of Architecture, both in practice and in teaching/scholarship



**Niall MacMonagle, Honorary Degree of Doctor of Literature**

Distinction in the Arts and Public Service to culture and literature in Ireland



**David Donoghue, Honorary Degree of Doctor of Literature**

Distinction in the Diplomatic Service



**Sir Ciarán Devane, Honorary Degree of Doctor of Science**

Distinction in Organisational Leadership



**Alistair Hetherington, Honorary Degree of Doctor of Science**

Distinction in Science



**Máirín de Búrca, Honorary Degree of Doctor of Laws**

Personal Distinction



**Naledi Pandor, Honorary Degree of Doctor of Science**  
Distinction in Science



**Shana Poplack, Honorary Degree of Doctor of Literature**  
Personal Distinction



**Patricia Rickard-Clarke, Honorary Degree of Doctor of Science**  
Personal Distinction



**Matthew Spiegel, Honorary Degree of Doctor of Laws**  
Personal Distinction



# Appointments and Promotions

## Appointments

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### Full Professor

**Professor Jonathan Bond**  
School of Medicine

**Professor Jacky Croke**  
School of Geography

**Professor Ian Davidson**  
School of English, Drama and Film

**Dr Anne Enright**  
School of English, Drama and Film

**Professor Murray Hitzman**  
School of Earth Sciences

**Professor Timothy Lynch**  
School of Medicine

**Professor Patrick Mallon**  
School of Medicine

**Professor Neil O'Connell**  
School of Mathematics and Statistics

**Professor Neil O'Hare**  
School of Public Health, Physiotherapy  
and Sports Science

**Professor Yvonne O'Meara**  
School of Medicine

**Professor Michael Wallace**  
School of Agriculture and Food Science



## Promotions

### Full Professor

**Professor Bill Watson**  
School of Medicine

### Professor

**Professor Orina Belton**  
School of Biomolecular and  
Biomedical Science

**Professor Oonagh Breen**  
School of Law

**Professor Eoin Carolan**  
School of Law

**Professor Tasman Crowe**  
School of Biology and Environmental  
Science

**Professor Eamonn Delahunty**  
School of Public Health, Physiotherapy  
and Sports Science

**Professor Barbara Dooley**  
School of Psychology

**Professor Geraldine Doyle**  
School of Business

**Professor Andreas Hess**  
School of Sociology

**Professor Christopher Jepsen**  
School of Economics

**Professor Andrew Keane**  
School of Electrical and Electronic  
Engineering

**Professor William Mulligan**  
School of History

**Professor Cormac Murphy**  
School of Biomolecular and Biomedical Science

**Professor Keith Murphy**  
School of Biomolecular and Biomedical  
Science

**Professor Kevin McDonnell**  
School of Agriculture and Food Science

**Professor John O'Connor**  
School of Biomolecular and Biomedical Science

**Professor Finola O'Kane Crimmins**  
School of Architecture, Planning and  
Environmental Policy

**Professor Conor O'Reilly**  
School of Agriculture and Food Science

**Professor Andrew Parnell**  
School of Mathematics and Statistics

**Professor Deirdre Raftery**  
School of Education

**Professor Brian Rodriguez**  
School of Computer Science

**Professor Kenneth Stanton**  
School of Mechanical and Materials  
Engineering

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

**Professor Wenxin Wang**  
School of Medicine

**Professor Graeme Warren**  
School of Archaeology

**Professor Paul Whyte**  
School of Veterinary Medicine



# Retirements

## Academic Affairs

### IT Services

#### Shaun Kennedy

Shaun joined UCD in 2001 as Chief Technology Officer for IT Services, retiring in October 2017. He was responsible for the IT infrastructure and operations function throughout the University, including data centre infrastructure (servers, storage, facilities, networking and appliances), network administration and engineering, vendor management, and tier 1, 2 and 3 support. Shaun's contribution to IT Services and UCD were invaluable and we wish him every good luck in his retirement.

### Library

#### Margo Mulligan

Margo joined the UCD Library service in 2004 and retired in September 2017. During her time in UCD, Margo worked with the Client Services Unit providing service and guidance to our users. Margo's patient and calm manner made her a great favourite with staff and students alike and she is much missed by all those who worked with her.

## College of Arts and Humanities

### Professor Maeve Conrick

Maeve was appointed Professor and Principal of the College of Arts and Celtic Studies (now College of Arts and Humanities) in 2011. Supported by a strong team, she led the College's strategic development through a challenging period in Higher Education. She was appointed as one of the two college principals on the University Management Team as a member of the UMT Financial and Operations Group, thus contributing significantly to UCD more broadly. She also contributed very significantly at national level as a Government-appointed member of the Higher Education Authority (HEA), from 2011-2015. She was Deputy Chair of HEA, 2012-2014. Her interests are in the areas of linguistics, sociolinguistics and applied linguistics, areas in which she continues to research. Her scholarship was recognised by the award of the prestigious Governor General's International Award in Canadian Studies in 2017. In 2018 she was invited to present keynotes at two international conferences: British Association for Canadian Studies and Irish Association for Canadian Studies. Professor Conrick is currently a member of the Board of the National Library of Ireland, the Press Council of Ireland and an international member of the UK REF 2021 Arts and Humanities Main Panel.

## School of English, Drama and Film

### Tony Fitzmaurice

Tony joined UCD Film Studies from NCAD as a specialist in Hollywood and in European Cinemas. He taught on the MA in Film Studies, the modular (evening) degree programme, and the undergraduate arts programme, with a special focus on Italian cinema. Together with then postgraduate fellow Mark Shiel, he organised the prestigious Cinema and the City conference, which resulted in two co-edited volumes, *Cinema and the City* (Wiley-Blackwell, 2001) and *Screening the City* (Verso, 2003). Together with Harvey O'Brien, he was the front-line of first year Film Studies in UCD from its inception in 2004 as part of the Arts curriculum to his retirement in 2018. He was co-ordinator of the MA in Film Studies from 2009. Tony was active in SIPTU and in environmental causes, and a keen observer of American Studies, whose development as a subject at UCD he supported and contributed to. His courses were always very popular and his students always remember him fondly after graduation. He was a generous and supportive thesis supervisor, who frequently made his extensive personal collection of materials freely available to students and was always student-centred in his approach to supporting learning.

### Professor Frank McGuinness

Frank joined UCD as Writer in Residence in 1997 having previously taught at the University of Ulster, Coleraine and NUI Maynooth. He was appointed UCD Professor of Creative Writing in 2007 and retired from this post in July 2018. A distinguished, versatile and prolific author, he has written extensively for the stage since his first play, *Factory Girls*, was premiered in 1982. Amongst his most renowned works are *Observe the Sons of Ulster Marching Towards the Somme*, *Carthaginians*, *Mutabilitie*, *Dolly West's Kitchen*, *The Matchbox*, and *The Hanging Gardens*. Additionally, Frank is celebrated for his accomplished adaptations of Ibsen, Lorca and Valle-Inclan and of Classical Greek tragedy, especially the plays of Sophocles and Euripides. He has written for television and for the screen, including the script for the film adaptation of Brian Friel's *Dancing at Lughnasa*. In recent years, he has added fiction to his literary achievements and has composed two novels, *Arimathea and The Woodcutter* and *His Family*, and a collection of short stories *Paprika*. An inspiring lecturer who taught widely across the curriculum, Frank was valued as a passionate and supportive colleague and a dedicated mentor of the students under his tutelage. We wish him well in all his future enterprises.

## School of History

### Kate Breslin

Kate came to the School of History from Business and was in the role of School Manager for over a decade and a half. As School Manager, she oversaw a time of great transition as the School evolved from the combined departments of History to the School of History and Archives and later to the School of History. In her role, Kate also supervised the adoption of the Horizons Programme, as well as two quality review processes. Kate was a much-respected and well-liked administrator of the School and a representative for administrative efficiency; her desk was not only the operational centre of the School, but also the social centre for academic and administrative staff, meaning she was a friend and confidante for all.

### Professor Judith Devlin

Judith retired from the School of History in December 2017. Before coming to UCD in 1990, she was a diplomat in the Department of Foreign Affairs and served in Paris and Moscow. She arrived in UCD as a Newman Fellow in History and was subsequently promoted to senior lecturer and professor. She has written or co-edited several books and articles especially in French and Russian history. These include *The Superstitious Mind* (Yale, 1987), *The Rise and Fall of the Russian Democrats: the Causes and Consequences of the Elite Revolution* (London, 1995), and *Slavophiles and Commissars* (London, 1998). Most recently, she co-edited *World War One in Central and Eastern Europe* (London, 2018). Her monograph on *The Stalin Cult* will be published next year.

## College of Business

### Dr Tom Gormley

For some ten years, Tom taught and researched in the Human Resource Management and Employment Relations Group at UCD College of Business. Tom's approach to teaching was informed greatly by his own experience of returning to formal education as a mature student. He cared deeply about his students and their formation. He strove continuously for the achievement of high standards both in his own teaching and in the engagement of students. He was and is a tireless advocate for mature students and for those who, for whatever reason, were denied the opportunity to avail of a university education as a young person. His stewardship of the Diploma/Bachelor of Business Studies, a distance-learning programme designed to meet the needs of this cohort of students, stands as one of his singular achievements. Tom also acted as mentor to junior staff colleagues and PhD students, imparting knowledge and offering support and encouragement through his uniquely avuncular and courteous manner. His research looked at various aspects of employment relations, including workplace partnership, pay bargaining and conflict resolution. As he departs the Employment and HRM Group, Tom will be remembered fondly and warmly as someone who stepped lightly and kindly through the halls of academe.

### Geraldine McEvoy

Geraldine took early retirement on 31 December 2017 following a career of over 35 years in UCD. She started in the Faculty of Commerce in 1982 and worked across many units of the now College of Business including Finance Subject Area, Business Research Programme, Smurfit Operations and most recently the Smurfit Programme Office. Geraldine made a significant contribution to the College of Business throughout her career. Her good humour and commitment to excellence were greatly valued by both students and staff who interacted with her. We wish her every happiness in her retirement.

## College of Engineering and Architecture

### School of Chemical and Bioprocess Engineering

#### Thomas Burke

Tom has retired as Chief Technician having played a leading role, for the last 40 years, in building the teaching laboratory and pilot plant facilities in the School to support the education and training of over 1,200 chemical engineering graduates. As a committed teacher, Tom shared a passion for chemical engineering, for technical excellence and for clarity in communication with every student in his care. He is also one of the few UCD staff to have been awarded an MBE. Tom, who founded the Royal Dublin Fusiliers Association in 1995, received the award in 2004 for the significant contributions he made to the Northern Ireland peace process. Tom was a member of the committee which organised the establishment of the Island of Ireland Peace Park in Messines in 1998. More recently, he published *From Messines to Carrick Hill*, a book based on the letters of a 19-year-old Irish officer in the 6th Royal Irish Regiment to his family in Carrick Hill near Malahide and focusing on the 1917 battle to capture the Belgian village of Wijtschate on the Messines ridge. Tom received an MA in History from UCD in 2014.

### UCD School of Electrical and Electronic Engineering

#### Professor Thomas Brazil

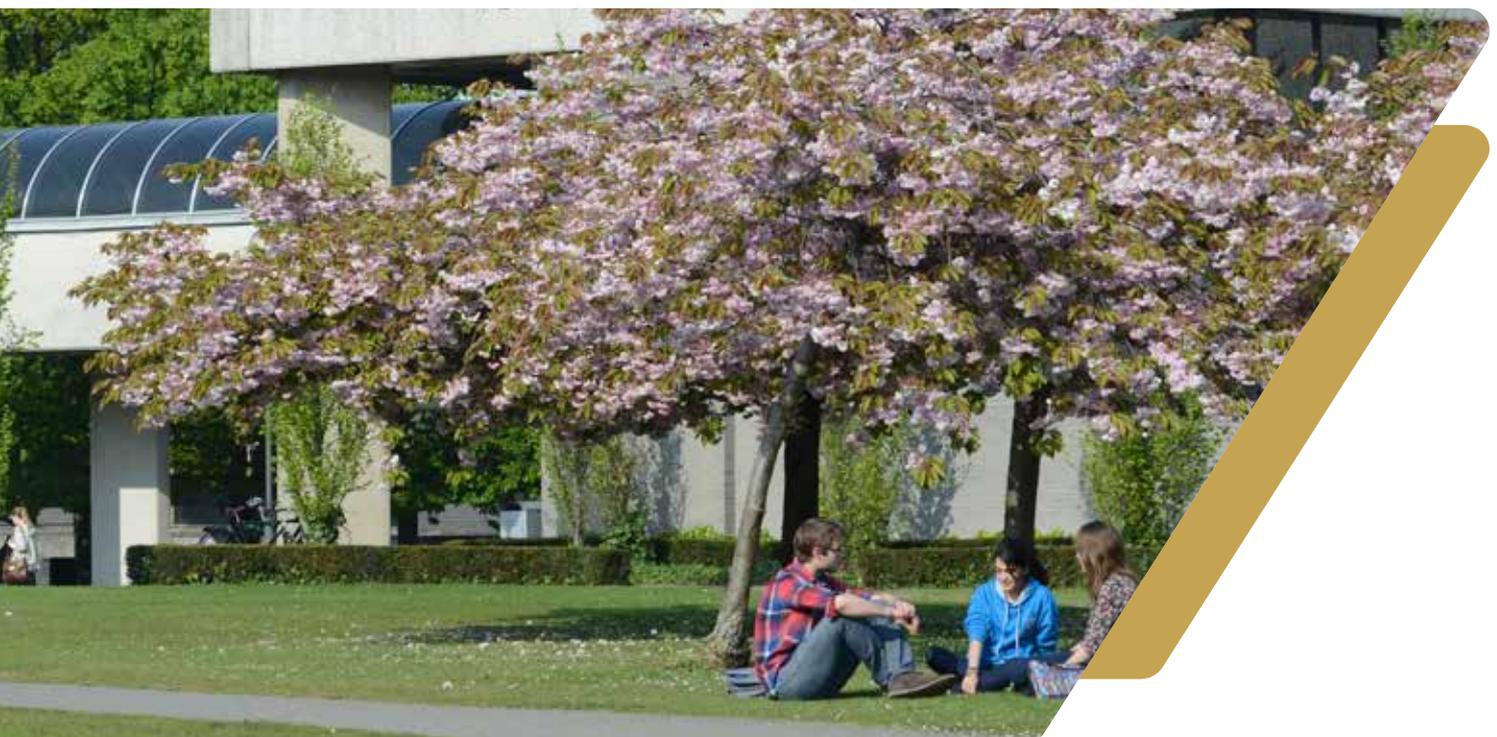
Tom passed away suddenly and unexpectedly at his home on 13 April 2018 and he is greatly missed by his colleagues, by his current and former students, and by the wider UCD community. He was a pioneer in the area of microwave electronics and wireless communications and his research focused on non-linear modelling and characterisation techniques at the device, circuit and system

level within high-frequency electronics. He was head of the RF and Microwave Research Group in UCD, whose research in high power amplifiers is internationally renowned, playing a significant role in the Internet of Things innovation.

Graduating with a first class honours BE in Electrical Engineering from UCD in 1973, he was awarded a PhD in 1977 by NUI. He spent two years working on microwave sub-system development at Plessey Research (Caswell) in the UK and after a year as a lecturer in the Department of Electronic Engineering at the University of Birmingham in the UK, returned to UCD to take up a faculty post here. A brilliant educator and mentor, he went on to become Head of Electronic Engineering in the UCD School of Electrical and Electronic Engineering, inspiring generations of students who benefitted from not only his outstanding scientific knowledge but his strong sense of community and social justice.

This sense of community led him to become an outstanding contributor to the wider UCD community. He served as a professorial representative on the Governing Authority for three five-year terms from 2001 to 2014 and was appointed to the Senate of the National University of Ireland in 2012.

Tom made no apologies in arguing in favour of the ongoing need to insist on attaining the highest academic standards in education and research, and for the necessity of UCD Engineering to continue to build on its hard-won reputation and international standing. That reputation was built over the decades on the work and contribution of many and, in the past decades owes a considerable debt to the influence and recognition given to Tom's own work and expertise in the microwave field.



### **Professor Michael Bruen**

Michael graduated from UCD with a bachelor's degree in civil engineering in 1975, before pursuing PhD studies under the supervision of Professor James Dooge. His early academic career commenced in University College Galway's International Postgraduate Hydrology Programme and included a five-year assignment co-ordinating the International Water Resources Engineering Programme in the University of Dar es Salaam, Tanzania. Following these roles, Michael joined UCD in 1991, becoming Professor of Environmental Hydrology in 2007. Throughout his career, Michael worked closely with Professor Dooge and also with Professor Eamon Nash, another eminent Irish hydrologist, and has remained at the forefront of establishing the key role of hydrology in both national and international environmental issues. He became Director of the UCD Dooge Centre for Water Resources Research in 1996 and served as its Director until his retirement. He has held numerous positions in UCD including that of Vice-Principal and Associate Dean of Engineering Taught Programmes from 2011 to 2014. He has also been a significant contributor to the profession of engineering through his leading roles and assignments in Engineers Ireland, the Irish Committee of the UNESCO International Hydrological Programme and the World Meteorological Organisation.

## **College of Health and Agricultural Sciences**

### **School of Medicine**

#### **Professor Denis A Cusack**

Denis retired from the University after 25 years of distinguished service with UCD. He has been a Full Professor and Head of Forensic and Legal Medicine at the UCD School of Medicine since his appointment in 1995 and Director of the Medical Bureau of Road Safety since 1999. Denis graduated from UCD School of Medicine in 1980. He trained in general internal medicine and diabetes/endocrinology in Ireland and the USA. He was called to the Bar of Ireland in 1991, following studies at Kings Inns specialising in personal injury and medical negligence actions. He is a Fellow of the Royal College of Physicians of Ireland (1996), a Fellow of the Chartered Institute of Arbitrators, London (1999), and a Foundation Fellow of the Faculty of Forensic and Legal Medicine at the Royal College of Physicians in London. He has developed several impactful graduate taught programmes in forensic and legal medicine, and in healthcare risk and quality management. He developed specialist training programmes for An Garda Síochána including roadside drug and alcohol impairment testing and sexual assault forensic examination. His dedication to teaching excellence was evidenced by his acquiring detailed knowledge of the Malaysian legal system in support of his teaching of Legal Medicine at Penang Medical College. Denis retains his roles as Director of the Medical Bureau of Road Safety and Coroner for County Kildare.

#### **Patty Maher**

Patty commenced in the School of Medicine in 2007 as student co-ordinator. Over the 11 years she was employed by UCD, Patty proved to be a valuable asset to the School and was always dedicated, compassionate and caring in her day to day interaction with the UCD medical students. Her expert administrative skills and management of the teaching programme ensured a very high quality of teaching was provided to our students whilst on clinical placement.

Patty retired in May 2018 and will be missed in St Colmcille's Hospital, Loughlinstown.

#### **Aloysius McGoldrick**

Alo commenced in the Diagnostic Laboratories Department of UCD, based in Earlsfort Terrace, in February of 1974, as a trainee technician progressing to senior technical officer in that facility until April 1998. The Diagnostic Laboratories closed around March/April 1998 by which time he transferred to Professor Peter Dervan's research team in the Bio-Technical facility (now the expanded Conway Institute) in Belfield until his retirement at the end of September 2017.

### **School of Nursing, Midwifery and Health Systems**

#### **Anne McMahon**

Anne began her well-earned retirement at the end of 2017. She joined the School in 2006 and has acted in the role of programme director to the Higher Diploma in Midwifery, one of the School's major registration education programmes. In that and other roles, she has brought her extensive experience, knowledge and expertise in midwifery to the School, advising on all aspects of midwifery and guiding both faculty and students in the development of midwifery education and practice.

#### **Anne Waters**

Anne gave outstanding service to the School for well over a decade. Her expert administrative skills and personal qualities were an invaluable resource for the School and its students.

### **School of Public Health, Physiotherapy and Sports Science**

#### **Róisín Arthurs**

Róisín was a part of the physiotherapy administrative team for 15 years, starting in the Mater Misericordiae University Hospital and moving with the School to the Belfield Campus in 2005. She worked closely with students from registration to graduation assisting them with their professional registration. Róisín is now leading a very active retirement.

### **School of Veterinary Medicine**

#### **Yvonne Abbott**

Yvonne retired from her position as Chief Technical Officer in the Veterinary Microbiology Diagnostic laboratory of the School of Veterinary Medicine after 40 years of service. Throughout her career, Yvonne has made an invaluable contribution, in particular in providing a comprehensive diagnostic service to the UCD Veterinary Hospital but was also involved in the training of many undergraduate and postgraduate students through assisting with their practicals and projects. We wish Yvonne an enjoyable and well-deserved retirement.

#### **Phelim Brady**

Phelim was an invaluable member of the Farm Animal/Equine units within UCD Veterinary Hospital for over 20 years. Having honed his skills in the Army Equitation School, Phelim (or Clutch as he was more commonly known) helped countless students master the art of safely handling highly strung sport-horses, imparting confidence and skills alike to future generations of vets and vet nurses. His modesty, constant good humour and ongoing commitment to promoting animal welfare further underpinned his huge commitment to the School and Hospital.

### **Sheila Ní Cheallaigh**

Sheila joined the Department of Animal Husbandry and Production in the UCD Faculty of Veterinary Medicine at the field station/farm in Kilkieran (now the site of the National Sports campus, Blanchardstown). She worked and served in the hormone assay laboratory in the School of Veterinary Medicine throughout her career and moved with the Department and School to the Veterinary College in Shelbourne Road (Ballsbridge) and then onto the UCD campus in Belfield. Her work underpinned the internationally recognised research programme in reproductive biology and stress physiology where UCD has been a leader in many salient discoveries that facilitated reproductive management of cattle, sheep and equine industries in Ireland and worldwide. Sheila contributed technical support to the research degrees of in excess of 50 students and in excess of 300 research papers throughout her career. We wish Sheila all the best in her retirement.

### **Máire O'Reilly**

Máire is a highly experienced veterinary nurse and provided many valuable years clinical service and teaching in the University Veterinary Hospital. She held a key strategic role as the first manager of the School's innovative Clinical Skills Centre.

## **School of Agriculture and Food Science**

### **Associate Professor Máirtín Mac Siúrtáin**

Máirtín obtained his BAgSc degree from UCD in 1977. He then pursued postgraduate studies in British Columbia and was awarded a masters of science degree in 1981. He joined UCD in 1982, and he taught forest biometrics, forest inventory and mensuration modules, mainly to the forestry students in the Faculty of Agriculture (now the School of Agriculture and Food Science). Máirtín was also active in research, where he was one of the first to develop a programme in the use of remote sensing and geographic information system applications in forestry. He incorporated his research findings in his teaching, while he also taught a number of postgraduate modules focusing on advanced statistical methods. He obtained a PhD in 2000 based on aspects of his research and teaching programmes and was promoted to Senior Lecturer (now Associate Professor) in 2006. Máirtín retired from UCD in 2017.

## **National Virus Reference Laboratory**

### **John Howard**

John, a fellow of the Association of Chartered Certified Accountants with an MSc in Management joined the University in 2000, as the NVRL Finance Manager. During his time in UCD, John also worked in the School of Medicine and the School of Business. John brought with him a wealth of experience and knowledge, having worked in various multinational companies throughout his extensive career. During his tenure in the NVRL, John played a pivotal role in building the strong customer relations that remains in place today, relationships which have been instrumental to the success of the NVRL as a national laboratory.

During his time as Finance Manager, John instigated and project managed a number of projects, with automation always at the forefront, thus streamlining the operations of the finance function. He also worked with philanthropic organisations, project managing the building and renovation of laboratories in Vietnam and Cuba.

John led and empowered his team, mentoring colleagues with professionalism and a strong work ethic. His contribution to the University and particularly the NVRL has been invaluable. He will be greatly missed by his colleagues and we wish him all the best as he embarks on this new chapter.

### **Paul O'Reilly**

Paul spent his entire working career at the National Virus Reference Laboratory (NVRL). After graduating with a BSc (Hons) from UCD in 1977, he was appointed to the position of technical officer in the Rubella and Hepatitis section. He moved to the Virus Isolation unit in 1980 where he introduced more rapid diagnostic technologies. In 1993 he identified the first recorded outbreak of Parvovirus B19 in Ireland which subsequently led to the introduction of routine testing in the NVRL. In 2002, Paul was promoted to the position of Chief Technical Officer in the Virus Isolation unit, where he continued to demonstrate the utmost dedication to patient care. He was instrumental in setting up the training and development programme for NVRL staff and was an enthusiastic mentor for the Vietnamese MSc students partaking in the Ireland Vietnam Blood Borne Virus Initiative (IVVI). Paul had a long association with UNITE (formerly known as MSF) the trade union. He was the union representative for the NVRL and was a member of the UCD Partnership Committee. He also served on the Council of the Academy of Medical Laboratory Science. Paul was a huge asset to the NVRL as a colleague, mentor and friend.

### **Marie Redmond**

Marie retired from the National Virus Reference Laboratory in September 2017. She joined the NVRL as an executive assistant in 2000 and quickly established herself as a valued and well-liked member of the NVRL administration team. Always kind, mild-mannered, and a pleasure to work with, Marie is much missed by her friends and teammates in the NVRL. She returned to work in January 2016 following a period of illness. Since retiring, Marie is enjoying spending more time with her husband, David, children, Peter and Julie, and her grandson, Freddie.

### **Noreen Williams**

Noreen retired from the National Virus Reference Laboratory in July 2018. She joined UCD in 1997, working first in the James Joyce Library, before joining the NVRL as an executive assistant in 1999. A warm and well-liked member of the administration team, Noreen is fondly remembered and missed by her colleagues and friends in the NVRL. Since retiring, Noreen has embarked upon an intensive yoga and alternative therapies course and continues to enjoy an active social life and time with her husband, John, sons, Mark and Steve, and her young grandchildren, Beth and Isla.



## College of Science

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### School of Biology and Environment Science

#### Associate Professor Kay Nolan

Kay graduated with a PhD from the Zoology Department at UCD in 1983. There she was part of a group studying various forms of the enzyme arginase in the context of cancer therapy. She has continued to work in areas that link basic biology with the causes of various diseases. She spent periods as a post-doc in Washington University, Saint Louis and Imperial College, London studying mannose-6-phosphate receptors and insulin-like growth factors. Since returning to UCD in 1991 her expertise allowed her foster many collaborations across the University and with groups worldwide where she used her unique background in zoology, evolution and genetics to inform our knowledge of genomic imprinting, particularly as related to muscular dystrophy and multiple sclerosis. Kay was a passionate teacher and educator, and will be greatly missed from the School and University, but we all wish her well in her retirement.

#### Dr Grace O'Donovan

Grace was appointed lecturer in ecology/environmental management with the Department of Environmental Resource Management, Faculty of Agriculture, UCD in Autumn 1997 until she took leave of absence from this position in Spring 2003. Prior to that she had been a lecturer in plant ecology in both University of Wales, Aberystwyth and in the Plant Science Department, University College Cork. Grace completed both her undergraduate and postgraduate degrees in Plant Science Department in Trinity College Dublin. Her interests included the Irish flora, landscape ecology, rainforest ecology and the ecological applications of satellite imagery. Her early research work included studies on the ecology of white clover at the Institute of Grassland and Environmental Research (IGER) Aberystwyth and Sites of Special Scientific Interest (SSSI) for Berkshire, Buckinghamshire and Oxfordshire Naturalists Trust. Following that she was involved in the production of one of the early CORINE landcover maps for Ireland. She subsequently supervised PhD studies on farmland biodiversity and integrated constructed wetland systems and was also involved in the mapping of Burren habitats using satellite imagery. She was a co-author with John Feehan on the books: *The Magic of Coole* and *The Bogs of Ireland*. Grace left UCD in 2003 and subsequently worked as an Environmental Consultant based in Bristol, UK and as an Associate lecturer in University of the West of England, Bristol, UK.

### School of Chemistry

#### Ann Connolly

Ann joined UCD in 1981 having previously worked in industry. In her early years as a technical officer, Ann acquired a broad experience across the spectrum of the School's teaching and research activities making substantive contributions to the organic, inorganic and bioorganic chemistry themes as well as within the School's Nuclear Magnetic Resonance (NMR) Centre. Subsequently, Ann joined the School's Microanalysis Laboratory, working with the then School analyst, Iseult O'Brien. This laboratory provided an enormously important elemental analytical service both to internal School and UCD customers as well as to a variety of non-UCD indigenous and international public and private sector clients. This was a demanding position and, on Iseult's retirement, Ann became the Department Microanalyst. In 1985, she became a senior technician and, in 1996, was awarded a MSc based on research carried out under the supervision of Dr Kenneth Glass. In April 2001, Ann was promoted to Chief Technical Officer (CTO), and, prior to her retirement, became managing CTO to all of the technical officers within the School of Chemistry, a role in which her many supportive interactions with colleagues and co-workers are fondly remembered.

## College of Social Sciences and Law

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### School of Social Policy, Social Work and Social Justice

#### Dr Phyllis Murphy

Phyllis retired from UCD on 18 January 2018 after working in UCD for over 25 years in various capacities. Her connection with UCD began in 1970 when she commenced study for a BSc followed by an HDip in 1974. In 1990 she enrolled as a mature student as one of the first cohort of students in the UCD Equality Studies Centre and went on to receive a Masters in Equality Studies and in 1995 to be awarded the first PhD in that field in the College. Over her working career in the Centre, which later became the School of Social Justice and more recently became part of the UCD School of Social Policy, Social Work and Social Justice, Phyllis worked in the role of Director of the Equality Studies Outreach programme and developed and delivered a wide range of training workshops and accredited courses to community, statutory and local development groups around the country, most recently the Irish Deaf Society, and Age and Opportunity.

## Commercial, Residential and Hospitality Services

### **Caroline Mulligan**

Caroline joined the UCD Main Restaurant as a catering supervisor in September 1985, was promoted to Senior Service Supervisor in 2002 and retired in 2018. During her 33 years at UCD, Caroline has been an integral part of the success of many major events such as Special Olympics, the World Irish Dancing Championships, Ladies World Hockey Championships, Men's European Hockey Championships and only last year the Women's Rugby World Cup. Caroline has also been central to UCD graduations and our summer school business.

### **Brian Langsdorf**

Brian joined the UCD Main Restaurant in 1977 as sous chef. Throughout his 41 years at UCD, Brian would be well known to those who frequent the main restaurant and was an integral part of hospitality services on campus. Brian's positive attitude and hard work has proved invaluable to the university over many years.

## Estate Services

### **Assumpta McDonnell**

Assumpta joined UCD in 1987 as a telephonist on the UCD Switchboard. So much of the work that she did was outward facing: helping students, visitors and members of the public connect with the right person in the University, always with a strong work ethic and personal approach. Assumpta retired in August 2018.

### **Jean Lowes**

Jean joined UCD in 1982 as a telephonist on the UCD Switchboard and spent the following 17 years providing a friendly voice and quality service to colleagues across campus and callers to the University until she left UCD in 1999. Jean's retirement came due in May 2018.

## Human Resources

### **Legal**

#### **Mary Hogan**

Mary retired from her role as Information Compliance Officer of the University in January 2018 after 17 years worthy service in UCD. Prior to this she was for many years a branch manager with EBS, after having originally qualified as a teacher. Mary embodied the values that so many of us strive to but do not always manage to achieve – unfailingly polite, supportive, modest, industrious and honest to name but a few. Mary had a role that was challenging at times but she was the consummate professional with an ability to deal with a demanding workload with skill and intelligence with a good dose of humour added to the mix. She was recognised as someone who you could trust and who would always seek to help a colleague and never to hinder them. Mary was deservedly universally liked and respected throughout the University community. She is much missed.

## Research, Innovation and Impact

### **Biomedical Facility**

#### **Alfie Redmond**

Alfie started working in UCD in 1979, initially in the Veterinary College in Ballsbridge. In 1986 he moved from Ballsbridge with Corrie Mehigan to combine all the Belfield animal facilities in the Central Animal Facility. He was appointed as Chief Technical Officer in 1992 and stayed in that role in the Biomedical Facility until recently taking early retirement. His work brought him in contact initially with undergraduates and latterly with postgraduate researchers – he was at all times most generous in sharing his knowledge and expertise with both students and his colleagues in the profession.

### **Earth Institute**

#### **Donal Lennon**

Donal joined the technical staff in UCD Mechanical Engineering in Merrion Street in 1980. He moved to the Urban Institute of Ireland in 2003 and later became part of the UCD Earth Institute team. He retired in September 2017 after 37 years of outstanding support for a huge diversity of projects and was a highly valued collaborator and colleague. He greatly enriched the UCD community with his depth of knowledge and his calm, helpful, good humoured approach.



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