





Contents

Overview by Professor Andrew J. Deeks, UCD President	2
UCD by Numbers	8
Education	12
Research, Innovation and Impact	22
UCD College of Arts and Humanities	34
UCD College of Business	38
UCD College of Engineering and Architecture	42
UCD College of Health and Agricultural Sciences	46
UCD College of Science	50
UCD College of Social Sciences and Law	54
Finance and Capital Development	58
Global Engagement	64
Health Affairs	68
Human Resources	70
University Awards	72
Appointments	7 8
Retirements	79

Overview by the President





Professor Andrew J. Deeks President

In this, my third annual report as President of this great University, I am happy to record that University College Dublin continues to punch well above our weight in our contribution to the flourishing of society nationally and globally.

Our biggest challenge remains the funding crisis. The third level sector has seen a 28% cut in exchequer funding over the past 7 years, coupled with an 18% increase in student numbers.

In July, the Minister for Education and Skills, Richard Bruton TD welcomed the Report of the Expert Group on Future Funding for Higher Education. Chaired by Peter Cassells, it was established to examine future funding requirements for higher education and to present options for developing a sustainable long term funding strategy for the sector.

The report concluded that current funding arrangements are not sufficient and it calls for the articulation and implementation of a clear funding strategy for the sector that will deliver a robust and steady base of funding to sustain the system into the future. It details a number of funding options for achieving this.

We have done extraordinarily well to maintain performance despite a national funding system that is broken, but the cumulative effect of the lack of investment has now reached a tipping point. I will continue to work with colleagues across the third level sector to push for political support and adequate investment in the sector.

Despite a disappointing outcome in some international rankings, we continue to make progress in terms of citations per faculty and other quantitative measures. We can and do compete with the best in the world when we have adequate funding in place.

Strategy 2015-2020

We are almost a full year into the operation of Strategy 2015-2020. Workstreams are underway around the University in response to the strategic planning process and outcomes continue to shape our decision-making as we work towards achieving our stated objectives.

University Management Team

During the year we announced the appointment of Professor Dolores O'Riordan as Vice-President for Global Engagement. She has responsibility for leading on Major Strategic Initiative 4 - Engaging Globally. Professor O'Riordan takes this position on a part-time basis and continues her role as Director of the UCD Institute of Food & Health.

In November 2015, Tristan Aitken joined us as Director of Human Resources from Diageo. The Principal of the College of Arts & Humanities, Professor Maeve Conrick,

completed her term at the end of August 2016. I would like to thank Maeve for her dedication and service during her tenure. In September 2016, we welcomed her replacement, Professor Sarah Prescott, who joined us from Aberystwyth University.

Global UCD

Globalisation is one of UCD's key strategic initiatives. Following Professor O'Riordan's appointment, we launched UCD's Global Strategy, with five key objectives:

- Develop a distinctive global culture which will encompass all aspects of University life
- Extend and develop strategic relationships to enhance our global engagement
- Grow our global reputation for excellence in education, research, innovation and impact
- 4. Increase the global impact of our scholarship, research, innovation
- 5. Further develop an enabling environment for UCD's global activities

This ambitious strategy will further enhance our international culture, grow our global reputation and increase the impact of our excellence in scholarship, research and innovation on key global issues. Faculty and staff around the University continue to be actively engaged in implementation of each of these objectives.

Education

The heart of UCD is our students. Their education is our mission. Through our teaching and learning approach we aim to open their minds to new ideas, to deeper thinking, to challenging convention. Moreover, we hope to inspire them to make their own mark on society and to become truly global citizens. They are the reason staff and faculty work together to develop a community that recognises excellence, contribution and effort.

This year we launched and have completed the first stage of a comprehensive curriculum review and enhancement project that has examined over 550 programmes at undergraduate and taught graduate level. We have reflected on 10 years of the modular structures and are planning the changes required to enhance and build on our unique offering. Deputy President and Registrar, Professor Mark Rogers outlines this and other initiatives in his report.

We continue to be the *University of First Choice* for almost 9,000 students and we now welcome over 7,000 international students, adding enormously to the diversity of campus life.

We continue to strive to diversify the student population to reflect general society. We like to think that providing access to education is in UCD's DNA and actively seek to widen participation among non-traditional groups and communities.

Colour on campus for the inaugural UCD Festival in June.

Research, Innovation and Impact

Professor Orla Feely presents her review of research, innovation and impact over the past year. A year in which UCD researchers continue to demonstrate their calibre registering externally funded contracts to the value of €93.7 million.

UCD retains its strong commitment to excellent research across all disciplines and at all scales. We value deep fundamental investigations as well as research that feeds near-term applications, and understand the mutually reinforcing links between them. We engage with industry, with social and cultural organisations, with government and with other partners in identifying and solving problems where our expertise can add value. We work globally, collaborating in research with 2,775 institutions in 146 countries.

UCD is also a leader in innovation and entrepreneurship. We have fifty companies on campus, between NovaUCD, the University's Centre for New Ventures and Entrepreneurs, and NexusUCD, the Industry Partnership Centre.

The past year saw the publication of *Innovation 2020: Excellence, Talent, Impact*, Ireland's national strategy for research and development, science and technology. Key to the strategy is a commitment to increase public and private investment in research, with a target of 2.5% of GNP by 2020. Increased investment is to be targeted at achieving substantial increases in research masters and PhD enrolments, a successor to the Programme for Research in Third Level Institutions. This will provide investment in new facilities and equipment, a new programme for support of frontier research, expanded participation in international organisations, and other initiatives. We share the ambition articulated by the national strategy, and look forward to working with government and other partners to deliver on it.

Decade of Centenaries - Commemorating 1916

We are now in the middle of the *Decade of Centenaries* which spans the period from 1912 and the introduction of the third Home Rule Bill, follows the First World War (1914-1918), the Easter Rising (1916) and will continue with the War of Independence (1919-1921) and the Civil War (1922-1923).

While the memory of these events in Ireland is inevitably local, they were, influenced by what was going on elsewhere in the world and they had an impact on politics in many other countries.





Pictured at the After Empire Leaders' Discussion student seminar are (l-r) Salman Khurshid, former Minister for Laws and Minister of External Affairs for India; HE Thabo Mbeki, former President of South Africa; and HE Benjamin Mkapa, former President of Tanzania.

With the depth of scholarship here in UCD particularly across disciplines in the humanities and the social sciences, we took the decision to undertake a comprehensive programme contextualising this period of history.

As part of this programme, Professor Orla Feely chaired a commemorations committee and initiated a seed funding round to encourage participation from colleagues around the University, to plumb the depths of their

scholarship and enable UCD to continue to value the ethos of justice and equality, alongside a sense of cultural identity that shapes our thinking and prompts our debate.

As a major holder of archives of national and international significance relating to the period 1912 to 1923, our vision for the commemorations was to inform national debate and understanding with an objective scholarly voice, in a manner that brings education and new perspectives to the fore.

Prinicpal Applicant	Title	College	School
Anne C Fogarty	Reading James Joyce's Portrait of the Artist as a Young Man 1916-2016	College of Arts & Humanities	School of English, Drama & Film
Ben Tonra	The State of the State	College Social Sciences & Law	School of Politics & International Relations
Caoimhín Mac Giolla Leith	Seacht mBua an Eirí Amach / The Seven Qualities of the Rising	College of Arts & Humanities	School of Irish, Celtic Studies, and Folklore
Conor Mulvagh	Globalising the Rising: 1916 in context [Conference: 5 & 6 February 2016, Decade of Centenaries]	College of Arts & Humanities	School of History
Conor Mulvagh	Universities in revolution and state formation: cross-national comparisons [Conference: 5 & 6 February 2015, Decade of Centenaries]	College of Arts & Humanities	School of History
Criostóir Mac Carthaigh	Remembering 1916: an online exhibition of audio and manuscript material from the National Folklore Collection, UCD	College of Arts & Humanities	National Folklore Collection
Elizabeth Mullins	Fevered archivists: Outreach strategies and the documentation of archival activity in the Decade of Centenaries	College of Arts & Humanities	School of History
Emilie Pine	1916: Home: 2016 Silenced Histories, Silent Voices	College of Arts & Humanities	School of English, Drama & Film
Emilie Pine	After the War: Commemorating the Great War in Ireland Symposium & Project Workshop	College of Arts & Humanities	School of English, Drama & Film
Finola O'Kane Crimmins	Conflict and Concrete: Reconstruction architecture in post-1916 Dublin, and the metaphoric role of concrete	College of Engineering & Architecture	School of Architecture, Planning & Environmental Policy
Finola O'Kane Crimmins	Pearse's Landscape	College of Engineering & Architecture	School of Architecture, Planning & Environmental Policy
Katherine O'Donnell	Revolting Women: Women in the Suffrage, Nationalist & Workers' Movements	College of Sciences & Law	School of Social Policy, Social Work and Social Justice
Lucy Collins	Reading 1916: An Exhibition at UCD Special Collections	College of Arts & Humanities	School of English, Drama & Film
Margaret Kelleher	Global Yeats: UCD Yeats 2015 Commemoration	College of Arts & Humanities	School of English, Drama & Film
Margaret Kelleher	Studies Irish and Anglo-Irish (1916, 1966, 2016)	College of Arts & Humanities	School of English, Drama & Film
Mark Jones	Globalizing early twentieth century Revolutionary History	College of Arts & Humanities	School of History
Paul Rouse	Historyhub.ie Centenary Content	College of Arts & Humanities	School of History
Regina Uí Chollatáin	Torthaí na Réabhlóide [Revolution: Results and Reappraisal]	College of Arts & Humanities	School of Irish, Celtic Studies, and Folklore
Robert Gerwath	1916 as a global event: A public lecture series	College of Arts & Humanities	School of History
Stephen Mulhall	The Citizen and the City; Disseminating Architecture at the City Assembly House (Dublin Civic Exhibition 1914)	College of Engineering & Architecture	School of Architecture, Planning & Environmental Policy
Tadhg O'hAnnracháin	Tom Kettle 100, one day symposium, Friday 9 September 2016	College of Arts & Humanities	School of History

Decade of Centenaries

The first of the Decade of Centenaries seed funding programmes was run in 2014. Thirty two competitive proposals were received and following a competitive evaluation process, 21 awards were made across the University. The awards commenced in October 2014 and will be completed in December 2016.

We also undertook a significant outreach programme under the direction of Eilis O'Brien, Director of Communication and Marketing. The programme involved the commissioning of a major work of art, a new piece of theatre, a major public forum and an extensive series of newspaper supplements. Here we outline these projects:

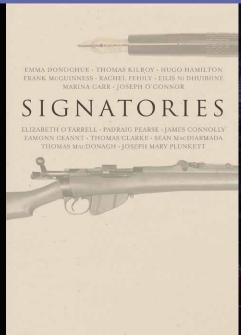
- 1. Signatories: Prompted by the fact that one of the signatories of the proclamation of Independence, Thomas MacDonagh, was Assistant Professor of English until the uprising, and drawing on UCD's extraordinary literary heritage, playwright Frank McGuinness, who is Professor of Creative Writing at UCD, was joined by another writer in residence, Éilís Ní Dhuibhne, alumni Marina Carr, Thomas Kilroy, Emma Donoghue, Joseph O'Connor, Rachel Fehily along with Hugo Hamilton, to create a play of monologues each taking a signatory and in the case of Emma Donoghue, nurse Elizabeth O'Farrell. This remarkable piece of theatre premiered in Kilmainham Gaol on 22 April and played to packed houses there and onwards at the Pavilion in Dun Laoghaire, the Civic in Tallaght and the National Concert Hall. The play returned to the Olympia Theatre in October and was performed as a reading at An Culturlann in Belfast. UCD Press published the work with a foreword by director, Patrick Mason. Signatories is a legacy to future generations of students of literature and drama who will have the privilege of experiencing how eight writers respond to a single brief - to bring to life the personality of their characters as they face the inevitability of their fate.
- 2. UCD Irish Independent 1916 supplement series: From October 2015 to March 2016, we produced ten supplements with the Irish Independent drawing on the scholarship of thirty faculty and graduate researchers from across many disciplines including: History, Irish, English, Music, Geography, Social Science, Law, Art History, Library, Archives and Folklore. Inserted with the newspaper every fortnight and distributed to schools throughout the country, the supplements contextualised the Rising in terms of the period and world events. Eight of the supplements followed chronologically and the other two concentrated on the role

- of women and the cultural context. The supplements can be read on the Decade of Centenaries website.
- 3. After Empire: With the support of the Department of Foreign Affairs, in particular, the Secretary General, Niall Burgess, we hosted a unique event with three leaders of former British colonies in UCD O'Reilly Hall on 4 February. Former President of South Africa, Thebo Mkebi, former President of Tanzania, Benjamin Mkapa, and former Minister of a number of key areas for India, Salman Khurshid, shared the stage with President Emeritus of UCD, Professor Art Cosgrove, President of the Royal Irish Academy, Professor Mary Daly, and Dr Conor Mulvagh. In their conversation in front of an audience of 1,200 they openly discussed issues of violence in insurrection, language, partition, independence and interdependence as each one played a pivotal role in the democratic development of their countries as sovereign states. We also recorded individual interviews with each leader and these can be viewed on UCD's YouTube channel.
- 4. The concept of commissioning a contemporary work of art in glass was inspired by the Kevin Barry Window from 1934 by Richard King of the Harry Clarke Studios, commissioned by UCD to commemorate the executed medical student Kevin Barry and one of the most treasured works of art owned by the University. It was decided that a glass artwork reflective of the modern world would be most appropriate to inspire current and future UCD students in the spirit of the 1916 proclamation. The artist, chosen by competition, Killian Schurmann (born 1963) is Ireland's foremost glass artist and he was awarded the commission through an open selection process. His iconic piece *Thaw* will be completed in October 2016 and is situated in the Newman concourse.

We will continue to bring the wealth of knowledge and talent of our faculty and staff to the fore and are planning a number of new projects for the coming period of the decade.

Shane O'Reilly as Joseph Mary Plunkett during the world premiere of Signatories at Kilmainham Gaol in April.
Signatories - a special edition publication by UCD Press launched at the world premiere.
Barbara Brennan portraying the figure of Nurse Elizabeth O'Farrell during the world premiere of Signatories at Kilmainham Gaol in April.









Reconnecting with Alumni Our Global Footprint

A source of great pride to me personally and to the University, and central to UCD's continued success in 2015/16 is our ever-growing global alumni community and their impact and reach on the world stage.

Over the last year, building relationships with our alumni locally, nationally and internationally, and developing and strengthening our graduate's place within the UCD community has been one of my key objectives. With more than 239,000 alumni in 160 countries around the world - the UCD alumni network continues to be influential, successful, active and truly global. During the last 12 months we have seen a 50% increase in our alumni staying connected to each other and to UCD through the online alumni engagement platform ucdalumninetwork.com

This last year has also seen many of our alumni making headlines around the world with Oscar winners, Olympians, NASA explorers, researchers and IT innovators, many of whom featured in September's Connections magazine. Read by 350,000 people all over the world, this year's magazine celebrated the global footprint of our alumni who are dynamic, networked and ambitious and whose success upholds the values that UCD holds dear - integrity, excellence, collegiality, engagement and diversity.

We celebrated just some of our exceptional alumni who uphold these values at the UCD Alumni Awards in November when more than 400 of UCD's most distinguished graduates, friends and staff gathered in UCD O'Reilly Hall. Among the awardees on the night for their contribution on the world stage were Dr Catherine Day who received the UCD Foundation Day Medal, Dr Dave Burke, Google's Vice President of Android, who received the award for Engineering and the Oscar-nominated director Dr Jim Sheridan for Arts.

One of my personal highlights of the last year was in June where we held the inaugural UCD Festival on campus - UCD's very own homecoming where we welcomed more than 6,500 alumni, students, staff and friends back to campus. The Festival celebrated the global footprint of UCD's

students and alumni through more than 100 engaging events across campus and provided an opportunity for alumni to reconnect with this unique and culturally rich campus.

The UCD Festival was just one of over 60 events held on campus last year, attended by a record-breaking number of alumni. We also engaged with our overseas alumni community through our 38 active alumni chapters around the world. Over the past 12 months during my travel abroad I've been fortunate to meet with many alumni personally at events in India, the US, the UK and China. In February a particular highlight was UCD being invited to hold a reception in the House of Lords with 250 of our alumni on the theme of 'Big Data and the Digital Age'.

Over the last year we have worked hard to create a mutually beneficial programme to engage our global alumni and we have trebled alumni engagement by updating our graduates through regular communications, events and professional career development opportunities. This new programme of activity was reflected by UCD winning a 2016 Circle of Excellence Award for our alumni engagement programme - the only Irish university to win a CASE award this year.

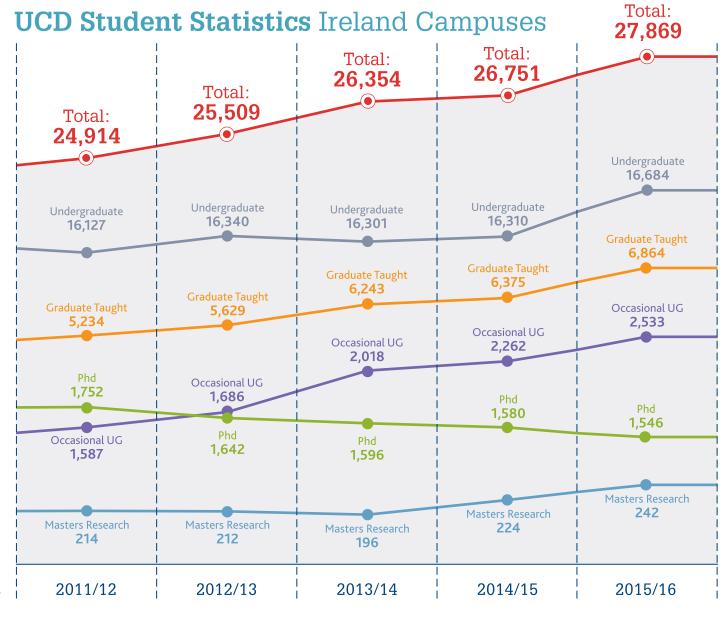
I would like to take this opportunity to thank the many thousands of alumni who continue to give back to their alma mater - either through giving of their time to our student-alumni mentoring programme or sharing their talent as speakers or advisors with alumni and students.

We have also seen an increase of almost 33% in alumni donating to our *UCD Champions - Changing Futures Campaign*. I would like to thank the 3,000 alumni who have again doubled the number of student scholarships they support. This is in addition to their support for the Library, Campus Development and Global Engagement funds.

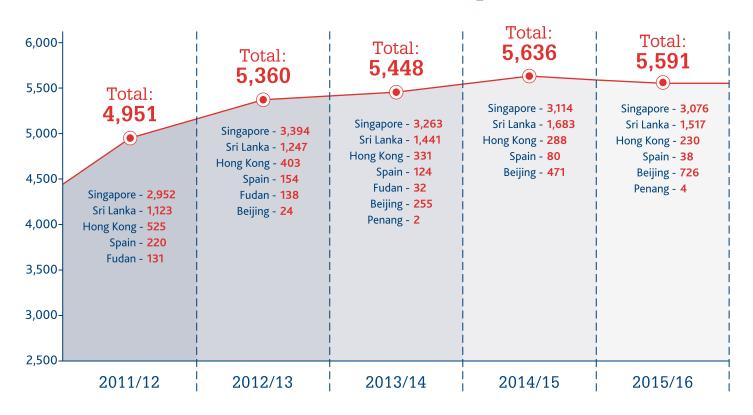
We are very proud of our alumni and their continued success globally - and I am confident that the ongoing support of our graduates will continue to make UCD a truly outstanding university for many years to come.

UCD by Numbers



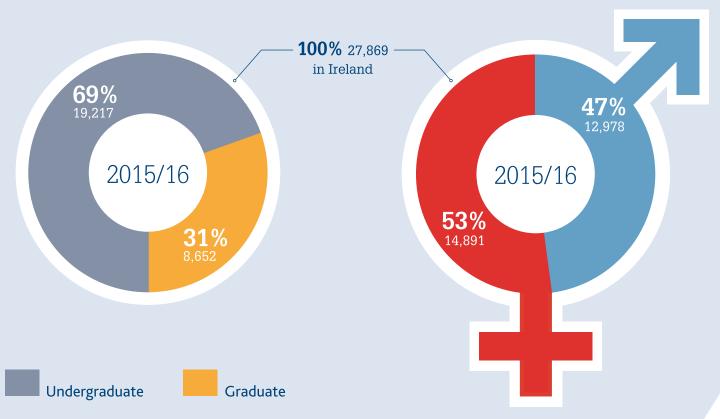


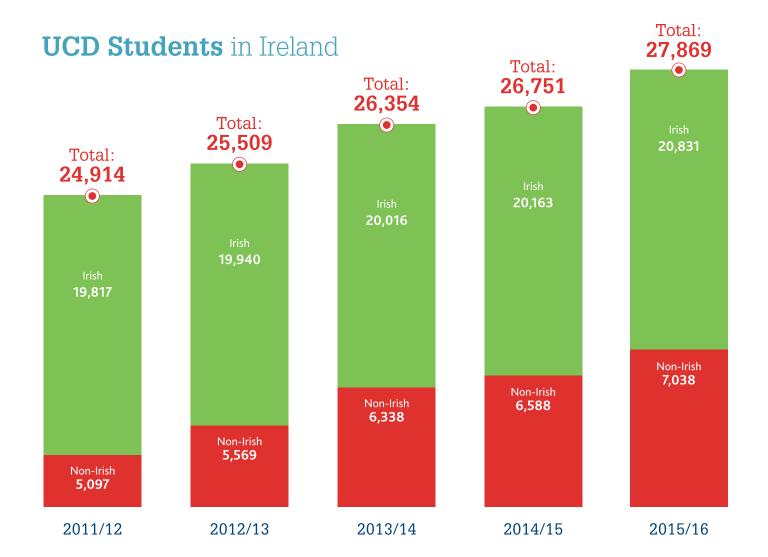
UCD Student Statistics Overseas Operations



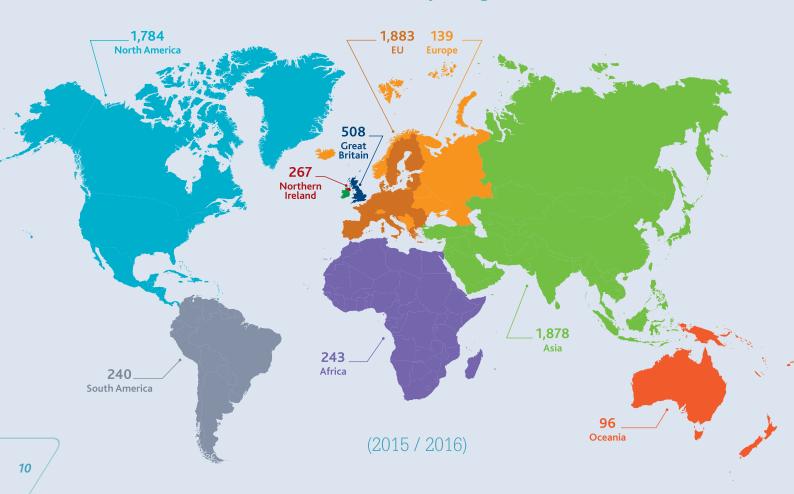
UCD Undergraduate/ Graduate Breakdown

UCD Male/Female Students





UCD International Students by Region



UCD Undergraduate and Graduate Numbers

by Discipline (Ireland 2015 / 2016)

Subject Area	Undergraduate	Graduate	Total
Generic Programmes and Qualifications	344	1	345
Education	-	509	509
Arts and Humanities	4,102	339	4,441
Social Sciences, Journalism and Information	1,423	759	2,182
Business, Administration and Law	3,746	2,489	6,235
Natural Sciences, Mathematics and Statistics	2,082	892	2,974
Information and Communication Technologies (ICTs)	355	540	895
Engineering, Manufacturing and Construction	1,692	792	2,484
Agriculture, Forestry, Fisheries and Veterinary	1,792	482	2,274
Health and Welfare	3,520	1,836	5,356
Services*	161	13	174
Grand Total	19,217	8,652	27,869
*Services include programmes such as Safety and Health at Work.			

Note: Figures are classified under the International Standard Classification of Education (ISCED) as used by the Higher Education Authority (HEA) and more widely to facilitate comparisons of education statistics across countries on the basis of uniform and internationally agreed definitions.

Top 20 Countries UCD Alumni**

10. Canada

1,127

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1. Republic of Ireland 197,443	6. Northern Ireland 3,393	11. India 832	16. Italy 429
2. Singapore 9,445	7. Hong Kong 2,637	12. Germany 822	17. Belgium 363
3. England, Scotland, Wales 4,988	8. People's Republic of China 1,874	13. Malaysia 755	18. The Netherlands
4. USA 4,230	9. Spain 1,177	14. France 751	19. Vietnam 267

15. Australia

3,708

5. Sri Lanka

20. Switzerland

UCD Foundation

I continued to be inspired by the steadfast spirit of our UCD community of alumni, donors, friends and champions who are committed to making a difference to the lives of students and to the success of UCD. Because of their crucial support throughout 2015/16, UCD was able to offer more scholarships to deserving students; offer wonderful fellowship opportunities to pioneering researchers; appoint more faculty to lead cutting-edge programmes; and fund numerous key initiatives including books for the Library, special awards for outstanding students and supporting students to travel abroad to further their education and research skills.

One of the outstanding achievements of the year is undoubtedly the magnificent performance at the Rio Olympic Games by eight of UCD's Ad Astra Sports Scholars. The Ad Astra Academy is made possible by a cohort of exceptional donors who believe in excellence. By giving these exceptional scholars bespoke, structured support through the Ad Astra Academy, they are able to excel and expand their potential, enabling them to make their dreams and aspirations a reality. I speak for the entire UCD community when I express how proud I am of each and every one of our outstanding athletes.

I was delighted to welcome a significant number of new corporate partners who have pledged their support to the University. These industry leaders understand that we all have a part to play in educating the next generation of leaders in business, healthcare, politics, sports, society and the cultural sector and their future successes will enhance the reputation of Ireland and of UCD.

During the year, we consulted with our alumni and supporters to invite their views on our proposed Campus Development plans. Over 2000 responded offering valuable insights and opinions which have been enormously helpful in refining our strategy and informing our next phase of development for the University. I am excited to oversee the roll-out of this next phase over the coming years.

2015/16 saw an increase of almost 20% in donors giving to support the strategic priorities of the University compared to the previous year. Every euro donated to UCD Foundation in 2015/16 had a significant impact on students through the provision of merit and needs-based scholarships, new programme offerings, medical electives, sports bursaries, choral and orchestral funding and access to leading-edge researchers. Significant funding was also secured to support world-class facilities including the Confucius Institute for Ireland and The Ulysses Centre at Newman House.

Philanthropy plays a critical role in UCD's success and I am very thankful to all of our donors, who are the backbone of UCD, for their generosity and encouragement. I am indebted to the many supporters who go above and beyond in an advisory, advocacy and financial capacity for the good of the University. My sincere thanks also to our diligent and conscientious Foundation Boards: UCD Foundation, Ireland; Friends of UCD, UK; and John Henry Newman Foundation, USA. Their ongoing commitment and dedication is greatly appreciated.

Professor Andrew J. Deeks President

31st August 2016









Professor Mark Rogers Registrar and Deputy President

Introduction by the UCD Registrar and Deputy President

How do we want our graduates to remember their University experience? We want them to think of it as a time of opportunity; when they were challenged intellectually, stimulated culturally and where they developed personally.

Our modern campus encompasses world-class teaching and research facilities with cutting edge information technology and creative curricular structures delivered to exacting teaching standards. We recognise and appreciate the inherent advantages of receiving an education in a research intensive environment. With a student body from diverse social and cultural backgrounds, students are taught and supported by dedicated research-active international faculty and staff.

The heart of a university is its people, students, staff and faculty working together to develop a community that recognises excellence, contribution and effort. Through our progressive and inclusive educational programmes and our facilities and campus environment, students exchange ideas, develop their interests, participate in sport and other activities and work together with faculty and staff to create the University community.

This year we have made significant progress in delivering on the UCD Strategy 2015-2020. We launched and have completed the first stage of a comprehensive curriculum review and enhancement project that has examined over 550 programmes at undergraduate and taught graduate level.

We have reflected on 10 years of the modular structures and are planning the changes required to enhance and build on our unique offering. As part of our review we are engaging with key stakeholders, students, employers and graduates so we can adapt our programmes to ensure our graduates are prepared for the challenges of active citizenship in a changing national and global society.

Notwithstanding the significant programme of work now in train, we remain the University of choice in Ireland for both local and international students with 8,760 CAO first preferences and an increase in international student numbers to 7,038. We reached a significant milestone in 2015 when 28.5% of our undergraduate students came through our widening participation pathways.

The optimal learning environment not only requires excellent research and actively engaged faculty, it also requires the integration of a wide range of policies, procedures and practices that must work together to support the delivery of our programmes and provide opportunities for engagement. We are committed and active in looking at our effectiveness across policies, processes and practices. In this section of the report, you will read how the University is actively working to embed these objectives.

Mik by

Professor Mark Rogers Registrar and Deputy President



Strengthening and Enhancing Academic Disciplines and Programmes

A major educational initiative undertaken by all UCD Schools in 2015/16 has been a robust curriculum review of all undergraduate and graduate taught programmes. This review focussed on the importance of articulating the learning outcomes that students are required to achieve and how faculty can effectively organise, deliver and assess the many strands of the curriculum to assure these outcomes. A number of specific programme enhancement themes informed the review process including a focus on embedding research in the undergraduate experience; developing discipline-specific as well as more general graduate attributes; designing effective and efficient assessment of outcomes, and an expansion of the use of technology to enhance learning. This major review will continue into 2016/17.

The 2014/15 UCD Fellows in Teaching & Academic Development finalised their research on the perceptions of both faculty and students on the impact of different research-teaching linkages in the undergraduate curriculum. A presentation of their findings was part of the UCD Teaching and Learning's *Learning through Research* symposium held in April 2016. This allowed staff from across the University to explore opportunities for UCD to build upon its strengths as a research-intensive university in developing a high quality learning experience.

In December 2015, UCD staff and faculty were honoured in the National Forum for the Enhancement of Teaching & Learning 'Teaching Expert Awards'. Professor Anne Drummond, UCD School of Public Health, Physiotherapy and Sports Sciences was one of the awardees for the design of bespoke resources to facilitate the transition from work into university for part-time, mature and industry-based working adults. Professor Drummond received a special commendation from the international panel for her work in *Bridging Non-Traditional Transitions*. The College Liaison Librarian Team, (Susan Boyle; Jenny Collery; Michelle Dalton; Peter Hickey; James Molloy; Carmel Norris and Diarmuid Stokes) were also shortlisted in the team awards for their work in designing a suite of supports for student learning.

Growing and Developing Graduate Education

Now at 31%, the number of students enrolled on graduate programmes at UCD continues to grow. In 2014/15 the number of graduate enrolments was 8,179 increasing to 8,652 in 2015/16. UCD is continuing to enhance our graduate portfolio to provide our growing number of students with an educational experience that defines best practice. Against this backdrop, one key new development in delivering graduate education was the introduction of graduate taught pathways programmes. Pathway programmes are now a sequence of UCD programmes at NFQ Level 9 which build to a Masters' degree award. Each programme in the sequence may operate as an entry and exit point. This development supports the fundamental flexibility and student mobility inherent in the Bologna principles. As such, UCD recognises the right of students to build their educational attainments through a number of different pathways, in terms of time/duration of study.



Figure 1: UCD Graduate numbers (Ireland campuses)

Highlights

- In 2016 as part of our strategy to attract and retain an excellent and diverse cohort of students, a new and enhanced Graduate Studies website was developed.
- Central to UCD's mission and vision is the development of a supportive and
 inclusive community of students. In line with this vision Graduate Studies
 welcomed incoming graduate students at the GradsConnect event in September
 2015. This event showcased the comprehensive suite of supports we offer
 to ensure a quality student experience. This was the third year that UCD
 formally welcomed its incoming graduate students, building on the success
 and feedback from previous years.
- UCD secured funding from the National Forum for the Enhancement of Teaching & Learning to lead and deliver the National Seminar Series 2016 on doctoral outcomes assessment. UCD is also leading projects with the UK Council for Doctoral Education and acting as the Irish HEI representative.
- UCD staff continue to be recognised nationally and internationally. As an
 expert in youth mental health, the Dean of Graduate Studies, Associate
 Professor Barbara Dooley, was asked to lead a workshop on the mental health
 and well-being supports for graduate research students at the U21 meeting at
 the University of Maryland in May 2016. Based on her research on supervisor
 developments in Australia and New Zealand, Dr Janet Carton was Plenary
 Speaker at the 9th EUA-CDE Workshop of Supervisor Developments at the
 University of Delft in January 2016.
- In 2015, with the support of the Ambassador of Ireland to Vietnam, HE Cáit Moran, UCD was also part of a high level delegation who travelled to Vietnam with the Irish Universities Association to promote doctoral education in Ireland.

Delivering and Measuring Quality

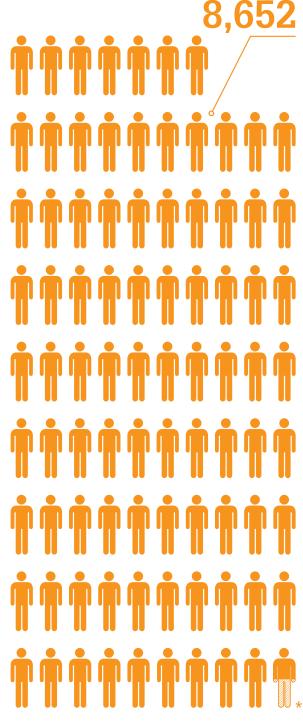
UCD has a number of instruments designed to measure and improve quality. These include surveys of student satisfaction and engagement, surveys of employer satisfaction with graduates, reports of external examiners and periodic quality reviews of schools and support units.

In the context of periodic quality review of schools and support units, an important aspect of our quality assurance and enhancement process is the engagement with the recommendations for improvement that have been generated by the Review Group, and the development of the Quality Improvement Plan (QIP), to address those recommendations. Each Review Group Report is considered by the University Management Team and is discussed with the Chair of the Review Group, prior to the report being considered by the UCD Governing Authority. The University also monitors the implementation and progress of the planned actions, approximately 12 months from the initial production of the QIP.

A key benefit of utilising peer review reports is that they provide a largely external, independent overview of UCD provision, the evidence of which is, in part, drawn from an academic and support unit's self-evaluation documents as well as international benchmarking data, which is explored and tested through a series of scheduled meetings with staff and students with the expert review panel. The periodic review process is a means of continuous improvement across UCD, including teaching and learning, research and infrastructure and enhancing the student experience.

2015/16 saw quality reviews completed for the following units: UCD School of Architecture, Planning and Environmental Policy; UCD Research, Impact and Innovation; UCD School of Medicine; UCD School of Information and Communication Studies; UCD School of Computer Science; UCD Student Centre; UCD International; UCD School of Law; UCD School of Archaeology (Research Assessment Pilot); and UCD School of Civil Engineering.

Total Number of UCD Graduate Students in Ireland



Overall increase in Graduate student numbers =

* = 100
People Approx

†20%

in the past 5 years

The impact of implementing the quality assurance framework within UCD tends to be reflected in continuous incremental enhancements, rather than fundamental shifts year-on-year, in practice, policy and/ or procedures. Examples include: changes to a module's assessment profile; prioritisation of research themes underpinned by matrices related to publications, grant income and international reputation; or the redevelopment of a school's workload model. It is important to note that there are no internationally agreed definitions or metrics on what constitutes quality in higher education.

A number of Quality Review Reports commented on the impact of the continuing reduction in funding for universities in the period under review. While it is not unusual to occasionally see resource issues and associated impacts mentioned in peer review reports, the number and nature of references across these reports was notable. However, it is also clear from the reports that, in spite of ongoing challenges, UCD is not complacent, and has risen to the challenges by diversifying and generating income from non-exchequer sources. To compete effectively in the global higher education market, UCD needs to continue to offer a teaching and learning environment with related resources, that are attractive and fit-for-purpose, in a highly competitive and 'rankings' driven market.

What is commendable and important to draw from our quality reports is the ongoing emphasis by UCD on enhancing the student learning experience and the continued commitment of faculty and staff to rationalise, innovate and minimise the impact of reduced resources on students.

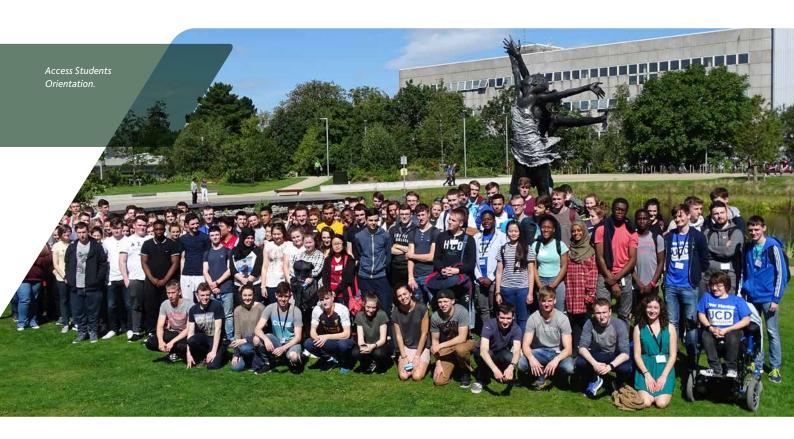
The credibility of the quality review process depends in large measure upon the currency of the knowledge and experience of review groups. The UCD Academic Council Committee on Quality acknowledges the significant contribution that review group members (both UCD reviewers and externs) make to the quality review process.

The participation of senior international faculty and staff in Quality Review Groups helps to benchmark our provision against leading world institutions and also serves to promote UCD's profile globally. External members of the Quality Review Groups are generally drawn from within the top 1% of global higher education institutions (and/or subject rankings). This year reviewers were from the University of Edinburgh, University of Melbourne and Humboldt-Universität zu Berlin. Overall in 2015/16, international reviewers were drawn from eight countries: USA, Australia, Belgium, Germany, UK, Denmark, Canada and New Zealand.

The Qualifications and Quality Assurance Act (2012) introduced additional responsibilities on Designated Awarding Bodies (DABs), where an award of a DAB is delivered through a linked provider. DABs are those institutions with the authority in law to make awards. These include previously established universities; the NUI, DIT and the Royal College of Surgeons in Ireland. UCD (as a DAB) has three linked providers: National College of Art & Design, the Institute of Public Administration and the Institute of Banking. In 2015/16 Quality and Qualifications Ireland developed a new Quality Assurance Policy Framework as part of the implementation of the 2012 Act, and asked higher education institutions to develop appropriate procedures to address a number of policy objectives. In response, UCD has developed two procedural frameworks. The first is to formally consider and approve a linked provider's quality assurance procedures. The second facilitates an institutional quality review of a linked provider, in order to evaluate the effectiveness of the quality assurance mechanisms that are in place to assure academic standards and to ensure that students have a positive experience while at the linked provider institution.

In April 2016, QQI also published the *Core Statutory Quality Assurance Guidelines for Irish Higher Education* which includes: Governance and Management of Quality; Staff Recruitment, Management and Development; Teaching and Learning; and Supports for Learners. The UCD Quality Office is currently mapping the requirements of the national guidelines to UCD provision.





Student Learning, Engagement and Development

Supporting students to undertake part of their study abroad is recognised as being of significant benefit to their overall university education. 17% of our students study abroad as part of their degrees, the highest proportion in the Irish sector. For students who are unable to spend time out of Ireland, UCD is exploring ways for them to experience 'virtual mobility', so they can interact with students and faculty from other countries.

Through UCD's membership of *Universitas 21* (U21), UCD students have been able to participate in a short online course with other students from the U21 global network, who number over 1.3 million worldwide. In 2015/16 the UCD Schools of Geography and Sociology and UCD IT Services were chosen to design a short online course for Planetary Urbanisation, which will go live to all U21 students in October 2016. The lead educator for the course is Dr Niamh Moore-Cherry strongly supported by Dr Joe Brady, Dr Gerard Mills and Dr Aogán Mulcahy who will teach on the course. UCD IT services provided high level technological support to the project and from late 2018 the course will be available as UCD's first MOOC on the FutureLearn platform, with fully open accessibility.

UCD continues to develop students' employability skills and graduate attributes, enabling them to manage the transition to graduate study and employment and enabling them to flourish as global citizens and lifelong learners. This has been achieved by the UCD Career Development Centre through a range of programmes, events and services that enhance career decision-making, students' self-confidence and skills portfolio, including programmes such as Skills for Working Life, experiential study visits carried out in the workplace, career development mentoring programmes and the accreditation of some co-curricular experiences using the City and Guilds Professional Recognition Award.

Operating both centrally and locally, this year Career & Skills Consultants delivered 196 bespoke workshops and lectures in UCD schools, reaching 8325 students. An additional 166 students received non-credit bearing

certificates from the Centre after participating in a range of career and professional development activities and 163 students undertook credit bearing modules in career and professional development. Career & Skills Consultants delivered over 2000 career coaching and guidance interventions and 25,109 unique visitors engaged with the Centre's website. Connecting UCD talent to leading national and international employers is a key strand of the Centre's strategy and this year, 4369 students attended Recruitment Fairs on campus with 176 employers. In addition, 2561 vacancies were loaded by employers to the Centre's vacancy database and 642 new employers established a relationship with the Centre. A further 106 employer-led events were facilitated, attracting an attendance of 2000 students.

UCD Supporting Partnership and Realising Change (SPARC)

Following a competitive process, four projects were funded through year two of the UCD SPARC programme which supports staff and students working together to deliver projects aimed at making UCD and/or the surrounding community a better place to live, work and learn: Building for the Future: Joining the All-Ireland Pollinator Plan, Constructing Social Spaces, Getting Around UCD: Accessible Route Videos and Growing Together: The UCD Community Garden Project. This programme was run by UCD Teaching and Learning in collaboration with the Students' Union.

UCD Student Digital Ambassadors

The UCD Student Digital Ambassadors initiative, launched in January 2016, received an enthusiastic response from the undergraduate student targe group. A wide range of activities was offered to students in partnership with collaborators in UCD including the Students' Union, the UCD Access & Lifelong Learning Centre, the UCD Library, UCD IT Services and UCD Teaching and Learning. It is envisaged this will enable participants to develop their own digital skills while also carrying out their ambassadorial role in sharing what they have learned with the wider UCD community and beyond. The UCD Student Digital Ambassadors initiative is part of the national *All Aboard: Digital Skills in Higher Education* project.

The Ad Astra Academy

The Ad Astra Academy recognises and supports talented and motivated students by providing them with a range of tailored supports and opportunities. It is governed by the UCD Ad Astra and Scholarships Management Board.

2015/16 saw the fifth intake of students to the Academy, which, since its inception in 2011, has awarded scholarships annually to high achieving academic, performing arts and elite athlete scholars. This year, 49 new scholarships were awarded: 30 academic, 15 elite athletes and 4 in the performing arts. Mentoring is a cornerstone of the scholarship programme, with approximately 52 academic staff mentoring scholars across the three strands.

Ad Astra scholars and alumni continue to make their mark, both during and after their time at UCD. Academic scholars have undertaken research placements in prestigious international universities, taken part in internships in major international organisations and received a variety of academic awards. The performing arts scholars are winning acclaim through professional theatre, film and music performances, while elite athletes have competed at numerous high profile sporting events. This year, eight of our elite athletes competed in the Rio 2016 Olympics, including Paul O'Donovan who won the silver medal in the men's lightweight double sculls rowing.

Widening Participation and Supporting Lifelong Learning

UCD continues to diversify the student profile to reflect that of general population. The participation rate by widening participation students now stands at 28.5% of undergraduate students, a significant milestone in the journey to attract and retain a diverse cohort of students. UCD now offers a total of six specific admissions pathways to encourage participation of under-represented groups; those which target school leavers, (HEAR and DARE) and those that offer older students pathways to study, including Mature Years, FETAC, Open Learning and Lifelong Learning.

UCD also offers two university preparation courses, i.e. Access to Science and Engineering, and Access to Arts and Human Science. In line with our

UCD For All

ongoing objective to ensure all students are recognised and valued equally, we have integrated the governance and management of the Access to Science and Engineering programme within the Science Programme Board. Similar integration of other programmes is planned for the coming sessions. Recognising the importance of our inclusion agenda, the University refurbished space adjacent to the James Joyce Library and brought together all Access and Lifelong Learning activities in a new state of the art facility which also acts as a showcase for the principles of inclusive design.

Highlights

- UCD offers supports and services across three principle strands, pre-entry initiatives, post-entry academic supports, and institutional mainstreaming. This year saw a highly successful pre-entry initiative launched to develop parents' knowledge of the possibilities that higher education offers. The 'Ballyfermot Parent's Education Forum' functions as a leadership programme with members co-facilitating higher education information seminars in their local area.
- Through the support of UCD Foundation, the highest number of Widening Participation Scholarships were awarded this year with a total of 71 scholars entering through UCD's alternative admissions routes.
- Innovation is an important ingredient in enhancing our service to students. Last year we launched a series of navigational videos funded through the SPARC initiative showing accessible routes around campus entitled *Getting around UCD VideoMap*. A Staff Disability Network was established which offers opportunities for faculty and staff with disabilities to connect through a dedicated network.
- UCD Open Learning, our route to part-time study, was expanded offering over 60 modules in 10 schools. Lifelong Learning also offers opportunities to engage in study without assessment with 1,327 registrations to the Lifelong Learning programme.
- UCD led a wide range of conferences and seminars offered to the higher education sector including: assistive technology workshops; digital mind mapping seminars; apps for dyslexia for parents and pupils offered in collaboration with the Dyslexia Association of Ireland; and a workshop on supporting students with mental health difficulties.
- The integration of all aspects of Access and Lifelong Learning culminated in the hosting of our first international conference attended by 200 delegates. The European Access Silver Jubilee Conference, themed Retrospective for Perspective was a three-day event, organised on behalf of the European Access Network and in partnership with National College of Art & Design and the Dun Laoghaire Institute of Art, Design & Technology. Integral to this event was the conference exhibition, called Access and the Looking Glass suggesting myriad perspectives of



Heading	2014	2015	2016
Socio-economically disadvantaged students (full-time degree only) (1)	1,717	1,746	1,320*
Students reporting a Disability (full-time) (2)	1,311	1,349	1,473
Students reporting a Disability (part-time)	23	48	51
Mature students (full-time) (3)	997	967	1,021
Mature students (part-time)	777	814	836
Part-time and flexible learning (4)	827	1,006	1,064
All UCD Widening Participation Students	4,375	4,437	4,755
TOTAL UCD undergraduate students	16,301	16,310	16,687
% Widening Participation Students	26.8%	27.2%	28.5%
New Entrants to Undergraduate Degrees - supplementary admission routes	2014	2015	2016
HEAR	255	234	269
DARE	196	153	233
FETAC	69	72	100
Mature	248	233	193

$Table \ 1: \ Widening \ Participation - Undergraduate \ Programmes \ (Certificates, \ Diplomas \ and \ Degrees)$

Note students may appear in more than one category

- (1) Students from socio-economic groups D, F, G & J (defined by Central Statistics Office)
- *The HEA adjusted their methodology for 2015/16 to include group J and counts 18-20 year olds only
- (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



Delivering Library, Information and Knowledge Management Services

UCD Library

UCD Library continued to drive innovation in the conception and delivery of services to the University community.

A key development in the past year involved bringing the three significant cultural heritage repositories under the umbrella of library activities: the National Folklore Collection, the UCD Archives and the Irish Dialect Archive. The administrative realignment of these collections brings about new opportunities for co-operation and leveraging core library services on behalf of the heritage collections. Professor John McCafferty, UCD School of History was appointed Academic Curator of the Cultural Heritage Collection, and as curator will co-ordinate the development of appropriate strategies and policies to safeguard and promote the collection.

Highlights

- Each of the heritage repositories contributed to UCD's Decade of Commemorations programme. In all, seven exhibitions were mounted (Reading 1916; Easter, 1916; Remembering 1916; Documents of 1916; and exhibitions in honour of Kevin Barry, Tom MacDonagh and Tom Kettle). One significant collaboration involved the Garda Museum and Archives as UCD Library digitised and published recently discovered arrest registers of the Dublin Metropolitan Police from the period of the Easter Rising; they are amongst the most valuable new documents to come to light regarding the revolutionary decade.
- UCD Library became a partner in the Google Arts and Culture online exhibition platform, and commenced a pilot phase in collaboration with academics from three separate schools: History, English, Drama & Film and Education. A touring display exhibition was also piloted for the first time, shown at libraries and heritage organisations across Ireland during the year.
- Collaboration with the Student Digital Ambassador Programme resulted in the student production of a popular library etiquette video with feedback used to inform current e-learning and web design strategy.

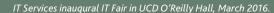
- The Irish Social Science Data Archive (ISSDA) added five major new studies over the year and the Library was in receipt of a Horizon 2020 award to broaden and strengthen participation in the Consortium of European Social Science Data Archives (CESSDA).
- The Library's GIS service was enhanced with the successful offering of walk-in GIS clinics. With assistance from PhD students, a range of workshops to support researchers was offered.
- UCD Library hosted the prestigious library information literacy conference, LILAC, drawing over 350 international delegates.
- UCD's commitment to excellence in teaching practice was recognised when the College Liaison Librarian team secured a National Teaching Experts award from the National Forum for the Enhancement for Teaching and Learning in Higher Education, at the National Teaching and Learning Summit in December 2015.

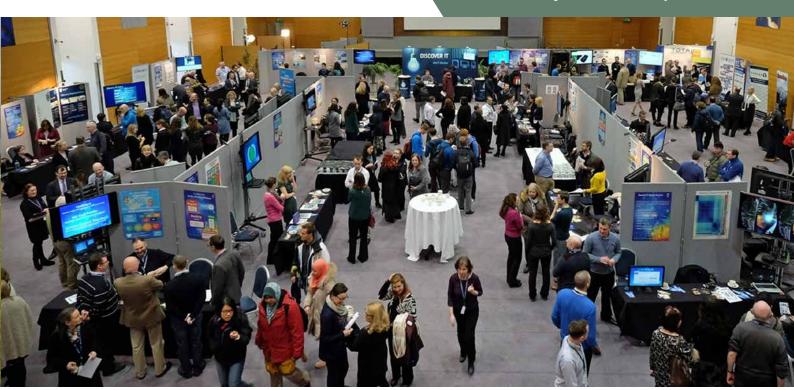
Information Technology

In recent years, UCD pioneered delivery of IT in the educational landscape with the development of a BYOD (bring your own device) campus, creation of the first high density data centre in Ireland to specifically support HPC in Ireland, and the introduction of Gmail for staff and students. In July 2016 we published our IT Strategy 2020 with the overarching vision to 'empower people by transforming University life with new and emerging digital technologies'. Our aim is to continue to lead in IT excellence and also to build on our commitment to develop a sense of community through our IT solutions and services.

Highlights

- In March 2016, IT Services ran their inaugural IT Fair in UCD O'Reilly Hall. The fair was an opportunity to showcase their broad role and also allowed IT staff to meet face to face with over 1,000 customers. UCD Registry, Teaching and Learning and the Library also participated.
- IT Services moved into the community with their new Mobile IT Centre by visiting a new building each week to offer IT support and receive customer feedback.





- EdTECx, a collaboration between IT Services and Teaching and Learning, continues to develop and strengthen UCD's teaching and learning community. The EdTECx in action series of digital technology talks/ workshops for UCD faculty and staff took place at the end of August 2015 and again in August 2016, both of which had well over 220 attendees.
- Research IT advanced the development of world-class facilities to support UCD's vision. Integrating the Earth Institute's High Performance Cluster GAIA into the University's Community Cluster Sonic, has provided access to HPC resources for the whole of our research community.
- A new set of templates for college and school websites were introduced increasing the agility and effectiveness of website development across the University.
- Additionally, to facilitate faculty in providing an educational experience
 that defines international best practice, a new Media Creation Suite
 was opened in 2016 offering a number of recording options including
 assisted recording of audio material with an audio specialist, self/
 assisted recording of video material, and video and audio editing.

Patrick O'Brien

It is with great sadness that IT Services remember the passing of Patrick O'Brien, 31, who died suddenly on Sunday 4 October 2015 from a heart attack. Patrick joined IT Services in 2013 and was a key member of the Research IT team. He was hard working, always willing to help and well liked by all he met in UCD. He is greatly missed.

Increasing Agility and Effectiveness

UCD Agile is a support for the UCD community in helping UCD be a better place to work, teach, research and learn by making the University's processes and procedures more successful and more efficient to deliver. Strategic Initiative 6 of UCD's Strategy 2015-2020 set this 'agility and effectiveness' agenda and UCD Agile began its work in February 2016. The Lean process enhancement methodology was chosen as the systematic approach to processes review and improvement and, using the 'start small and expand' model, a first wave of change projects ran from March to August. Three of these projects saw enhancements to the Library's reading lists process, to HR's staff recruitment process, and to UCD Research's outputs collection process. A second wave of six projects begins in October 2016, across Registry, HR, the Bursar's Office and the College of Social Sciences and Law.

In terms of the reach of this activity, by the end of August 2016, 71 staff had been through formal training at various levels, with a planned total of 159 by the end of 2016. Many more gain directly from the work of

these projects - all those hiring faculty/staff or applying for posts (HR's first wave project), all module co-ordinators and their reading lists (UCD Library's first wave project), as two examples.

The purpose of these waves of projects is threefold - to address the issues in a given project, provide training and experience to staff and grow UCD's process enhancement capability. This capability has two aspects: the skills and experience of frontline staff; and (local/central) management's use of process enhancement in furthering strategic goals.

Planning workshops for 2017 projects are currently under way. This third wave of projects will shift from a support unit-centric approach to a portfolio of school-focused projects, again with the threefold purpose noted above. Work is also in hand for Work Smarter Together 2017 (WST 2017), a University-wide event on March 15 2017 focused on all those whose work creates the environment in which our teaching and research takes place, engaging the UCD community through collaboration, creativity and celebration.

Delivering Excellence in Student Experience

UCD's reputation, and our success, is crucially dependent on our ability to deliver an excellent student experience, and is an integral part of attracting and recruiting the world's best students to the University.

Highlights

- A new A-level scoring system was implemented which resulted in a 60% increase in offers to A-level applicants. It is envisaged that over time, the new scoring system will increase the number of A-level applicants from Northern Ireland and Great Britain who attend UCD, thus increasing the diversity of our student population.
- During 2015/16 the Current Students website was redeveloped based on feedback from the student body along with an analysis of statistics gathered using Google Analytics. The new layout, search engine optimisation and the move to present information using clear, concise 'plain' English, ensures that users gain the knowledge they require from the site. In addition, online guides and tutorials were included to assist with registration.
- A major focus in 2015/16 was increasing student engagement on social media. Colleagues from across the University made an effort to send out a unified message from the University using #helloUCD.
- In early 2016, a single information point for student supports was created on the Current Students website. The information point provides contact information and advice for students who may need extra help during their time as a UCD student.



Pradeep Pujar of Germany in action against James Breen of New York during the GAA World Games in UCD, August 2016.



Professor Anne Drummond receiving a Teaching Expert Award from the National Forum ir December 2015.

- Almost 3,500 responses were received from a Student Survey on exams
 that focused on a number of key areas including suitability of exam
 venues and the supports provided by UCD Assessment. It also covered
 assessment workload and remediation, such as appropriateness of the
 spread of exams over 11 days; weighting of continuous assessment
 and end-of-semester components; and managing repeats or resits as
 part of the semester's workload.
- August 2016 saw the introduction of several technological innovations
 that enhance the student experience. Students can make applications
 for a leave of absence via an online form within their SISWeb account.
 Developed in conjunction with key stakeholders across campus, a
 similar form has also been developed for programme withdrawals.
- As part of the ongoing development of the UCD Student Desk, a Student Welcome System has been introduced that allows students to scan their UCARDs on arrival, which directs them to seating, provides an estimated waiting time and automatically supplies assisting staff with key information. This system does not reduce the personal engagement between staff and students but, at busier times of the year, provides greater transparency for students and allows their questions to be dealt with in a more efficient manner.
- UCD Chaplaincy's open door policy provided support to our students
 affected by the tragic accident in Berkeley, California in 2015. At a
 time of sorrow, distress and bereavement, our chaplaincy team were
 an invaluable resource to all students and staff across the University.
 This year marked the retirement of Fr John McNerney as head chaplain
 after 23 years of service. The appointment of his successor, Fr Leon Ó
 Giolláin, and two additional chaplains, Fr Eamonn Bourke and Scott
 Evans (Church of Ireland) have added new impetus to the mission.

- The health and wellbeing of our students has always been paramount in achieving academic productivity and a balanced lifestyle. UCD Sport & Fitness reports an excess of 370,000 visits made by our student body within the 2015/16 academic term consolidating the importance of this service.
- With a 3% growth over the previous year, UCD societies now have a
 membership base in excess of 49,500 students, with many students
 joining more than just one society, reflecting a deep community based
 student engagement ethos. Over the 2015/16 season, their efforts
 and achievements have supported direct fundraising to 41 charities.
- Over 500 students across 30 sports were recognised at the 2015/16
 UCD Sport Awards ceremony which reflects on the impressive level
 of sporting achievement attained by our students across all levels
 from varsity to national to international representation.
- In this Olympic year, eight students and recent graduates represented Ireland in Rio: Mark English in the men's 800m, Ciara Mageean in the women's 1500m and Ciara Everard in the women's 800m, Arthur Lanigan O'Keeffe in the Modern Pentathlon, Paul O'Donovan in the men's lightweight double sculls, Claire Lambe in the women's lightweight double sculls and hockey players Kirk Shimmins and Shane O'Donoghue. In swimming, Nicola Muscat represented Malta in the 50m freestyle.
- It was also a triumphant year for UCD GAA with success in the Sigerson
 Cup for the men's Gaelic football team. The ladies' Gaelic football
 team also won the O'Connor Cup. This has all come about from the
 grassroot work of Dave Billings, GAA Executive, who sadly passed
 away in 2015.
- UCD Soccer had a double win in both the Collingwood and Harding Cups, while the first UCD men's hockey team was promoted to the EY Hockey League. The Sportsperson of the Year went to two outstanding athletes: Josh Van Der Flier (rugby) and Jack McCaffrey (Gaelic football) in recognition of their sporting achievement and contribution to university and sporting life.
- UCD Sport also played host to the Women's World Rugby 7s Olympic Repechage as Ireland bid to qualify for the Rio Olympic Games. It showcased UCD's campus facilities on an international stage in preparation for next year's eagerly anticipated Women's 2017 Rugby World Cup. In partnership with the GAA, the official GAA World Games were event-managed by UCD Sport, where 57 teams (25 non-Irish) competed across 8 different competitions in hurling, football, camogie and ladies football.



Research, Innovation and Impact





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

Introduction from Vice-President for Research, Innovation and Impact

It is a pleasure to present this review of research, innovation and impact in University College Dublin over the past year.

UCD retains its strong commitment to excellent research across all disciplines and at all scales. We value deep fundamental investigations as well as research that feeds near-term applications, and understand the mutually reinforcing links between these. We engage with industry, with social and cultural organisations, with government and with other partners in identifying and solving problems where our expertise can add value. We work globally, collaborating in research with 2,775 institutions in 146 countries.

UCD is also a leader in innovation and entrepreneurship. We have over fifty companies on our campus, between NovaUCD, the university's Centre for New Ventures and Entrepreneurs, and NexusUCD the Industry Partnership Centre. The decision by IBM to locate two co-labs on our campus is a further testament to the value of our research and innovation environment. This environment will be further enhanced by the new €60 million University Bridge Fund, which will invest in new companies that can grow and scale to compete in global markets.

Outreach, engagement and the delivery of impact are essential components of our research and innovation programme. The past year saw a wide range of activities in these areas, including the inaugural and highly successful

Sci-Com conference on science communication. Tools and resources supporting the online promotion of research, and the capture and communication of research impact, were also developed for the UCD research community.

The following sections highlight some of our major achievements in research and innovation over the past year within our major strategic themes of agri-food, culture, economy and society, energy, environment, health, and ICT. These highlights include prizes and awards, major publications, partnerships and significant research grants.

The past year saw the publication of Innovation 2020: Excellence, Talent, Impact, Ireland's national strategy for research and development, science and technology. Key to the strategy is a commitment to increase public and private investment in research, with a target of 2.5% of GNP by 2020. We in UCD share the ambition articulated by the national strategy, and look forward to working with government and other partners to deliver on it.

Once again, it is a pleasure to record my appreciation for the researchers, research support staff and committed partners who deliver and enable our success.

Professor Orla Feely

UCD Vice-President for Research, Innovation and Impact

Research Publications: details of all research publications for the period of the Report are available online at www.ucd.ie/research/publications

Research Funding

Externally funded research contracts registered during the year amounted to €93.7 million (see Table 1). Table 2 shows the largest research grants awarded this year. Externally funded research awards are lower this year than those recorded in the previous year. This is due primarily to certain major calls either not delivering an output by the UCD financial yearend, or not taking place this year. For example, SFI Centres accounted for €22 million of grant registrations in 2014/15, but no new Centres were funded in 2015/16.

Seven research projects received in excess of €10.7 million in funding through the SFI Investigator Programme, which supports excellent scientific research with the potential to impact Ireland's economic and societal development. One research professorship in excess of €6 million was awarded to Professor Fengzhou Fang.

Two SFI strategic partnerships were awarded: Energy Systems Integration Partnership Programme (€4.6 million), led by Professor Mark O'Malley, and Usage of Omics Technology for Identification of Critical Mediators and Pathways in Patients with Recalcitrant Atopic Dermatitis, Psoriasis and Hidrenitis Suppurvativa with Abbvie (€1.4 million) led by Professor Martin Steinhoff.

European funding is a particular priority for UCD, and accounted for almost 17% of UCD's overall awards in 2015/16. UCD is also leading on two awards in the societal challenges funding strand.

UCD Seed Funding Scheme

The UCD Seed Funding Scheme is an important internal mechanism for the development of research in UCD. During the past year 396 proposals were submitted under the five programmes (including Visiting Professorships), and 140 awards were granted (35%), amounting to approximately $\[\in \]$ 0.5 million.

In addition to the Seed Funding Scheme, the New Interdisciplinary Initiatives Scheme (NIIF) was also introduced this year. This attracted a significant number of applications (86) of which 8 successful awardees shared a total of €262,960. Full details of the Seed Funding Scheme are shown in Table 3.

Publication Metrics

In 2015, there were 3,091 papers listed in Elsevier SciVal for UCD (see Table 4). Although the coverage in these data does not reflect the totality of UCD's publications 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 10 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 the 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 are 62% more cited than the world average, putting UCD on a similar plane with many other leading international research-intensive universities.

	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16
Total value contracts signed incl. contributions to overheads (€ million)	€ 95.4м	€ 115.9м	€ 116.8м	€ 49.5м	€ 103.3м	€ 75.7м	€ 113.3м	€ 114.1м	€ 106.3м	€ 93.7м
Total contributions to overheads (€ million)	€ 14.8м	€ 17.3м	€ 21.0м	€ 6.7м	€ 17.0м	€ 9.5м	€ 17.4м	€ 16.5м	€ 17.2м	€ 13.2м
Total number of contracts awarded	452	445	537	449	510	532	614	672	627	652
Number of proposals submitted	1,234	1,090	1,150	1,069	1,123	1,263	1,167	1,245	1,603	1,372

2015/16 Contracts

Funding Source	Number of Contracts	Value (€ million)
Science Foundation Ireland (SFI)	91	€ 36.2м
European Commission (EC)	39	€ 15.3м
Irish Research Council (IRC)	109	€ 7.8м
Enterprise Ireland (EI)	110	€ 6.7м
Department of Agriculture	3	€ 2.0м
Others	300	€ 25.7м
Total	652	€ 93.7м

Table 1: Research Awards

Leader	Funding Source	Programme	Title	€Millio
Professor Fengzhou Fang	Science Foundation Ireland (SFI)	Research Professorship	Professor Fengzhou Fang - Ultra precision machining in medical device manufacturing	€6.1м
Professor Mark O'Malley	Science Foundation Ireland (SFI)	Strategic Partnership Programme	Energy Systems Integration Partnership Programme (ESIPP)	€4.6м
Professor William Gallagher	Science Foundation Ireland (SFI)	Investigator Programme	Optimal Management of Gender-Specific Cancers via Efficient Use of a Protein Profiling, Digital Pathology and Systems Medicine Tools (OPTi-PREDICT)	€2.5м
Professor David MacHugh	Science Foundation Ireland (SFI)	Investigator Programme	Development of Next-Generation Control Tools for Bovine Tuberculosis: A One Health Approach	€1.8м
Dr Federico Milano	Science Foundation Ireland (SFI)	Investigator Programme	Advanced Modelling for Power System Analysis and Simulation	€1.7м
Dr Vladimir Lobaskin	HORIZON 2020	IL - Leadership in enabling and industrial technologies (LEIT) NANO	Smart Tools for Gauging Nanodangers (SmartNanoTox)	€1.7м
Professor Séamus Fanning	Enterprise Ireland (EI) & Industry	Innovation Partnerships	Origin Green Micro Surveillance - Protecting the Next Generation	€1.7м
Associate Professor Aoife Gowen	Science Foundation Ireland (SFI)	Investigator Programme	Multi-scale hyperspectral imaging for enhanced understanding and control of food microbiology (HyperMicroMacro)	€1.5м
Professor Porscha Fermanis	HORIZON 2020	ES - ERC Starting Grant	Realigning British Romanticism: White Settler and Indigenous Writing in the British-Controlled Southern Hemisphere, 1783-1870 (SouthHem)	€1.5м
Professor Eilish McAuliffe	Health Research Board (HRB)	Research Leader Awards	Collective Leadership and Safety Cultures (CO-LEAD)	€1.4м
Professor Martin Steinhoff	Science Foundation Ireland (SFI) & Abbvie	Strategic Partnership Programme	Usage of Omics Technology for Identification of Critical Mediators and Pathways in Patients with Recalcitrant Atopic Dermatitis, Psoriasis and Hidrenitis Suppurvativa	€1.4м
Professor Jenny McElwain	Science Foundation Ireland (SFI)	Research Infrastructure	Integrated Plant Phenomics & Future Experimental Climate Platform	€1.3м
Dr Patrick Mallon	Gilead Sciences	Research Project	GS-US-311-1717 Platelet sub-study	€1.2м
Professor Eoin Casey	Science Foundation Ireland (SFI)	Investigator Programme	Interactions between bacterial biofilms and nanoparticles: a focus on the EPS matrix	€1.2м
Professor Catherine Godson	Science Foundation Ireland (SFI)	Investigator Programme	Discovery of an integrated risk profile for chronic kidney disease and development of a clinical biomarker panel for personalising medicine	€1.2м
Professor Fiona Doohan	HORIZON 2020	ES - Marie Skłodowska-Curie Innovative Training Network (ITN)	CEREALPATH - training in innovative and integrated control of cereal diseases	€1.1м
Professor Finbar Mulligan & Dr Karina Pierce	Enterprise Ireland (EI), FBD Trust Company Limited & DAIRYMASTER	Innovation Partnerships	Innovative Dairy Production Systems and Technologies (DairyTech)	€1.0м

Table 2: Largest Grants Awarded to UCD 2015/16

Programme	Volume of Applications	Value of Applications (€)	Volume of Awards	Value of Awards (€)
Career Development Award	56	€701,547	18	€132,472
Dissemination and Outputs	203	€352,872	82	€107,664
Horizon Scanning	96	€1,148,237	26	€218,868
Incoming and Outgoing Visiting Professors	24	€277,172	6	€32,070
Equality, Diversity and Inclusion Research	17	€96,115	8	€18,321
Grand Total	396	€2,575,943	140	€509,395
College	Volume of Applications	Value of Applications (€)	Volume of Awards	Value of Awards (€)
UCD College of Arts and Humanities	38	€168,475	18	€55,136
UCD College of Science	128	€805,488	46	€228,009
UCD College of Science UCD College of Business	128 11	·	46 5	
ū		€805,488		€228,009
UCD College of Business	11	€805,488 €119,485	5	€228,009 €14,544
UCD College of Business UCD College of Engineering and Architecture	11 56	€805,488 €119,485 €350,630	5	€228,009 €14,544 €37,437
UCD College of Business UCD College of Engineering and Architecture UCD College of Health and Agricultural Sciences	11 56 105	€805,488 €119,485 €350,630 €802,615	5 18 31	€228,009 €14,544 €37,437 €90,480

During the past five years, 20% of UCD's publications were in the top 10% of the most cited worldwide. In addition, more than half of the publications were co-authored with institutions in other countries. emphasising UCD's position as a global university.

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:

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

1. 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 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

The Dairy Research and Education facility at UCD Lyons Research Farm was officially opened in 2016. An exciting €2.3 million partnership between academia and industry, this world-class industry-led facility will investigate innovative models of milk production and provides an excellent environment for teaching and research connected with dairy sciences. Research already in the pipeline relates to genetics, nutrition, reproduction of dairy cows and herd health management.

Professor Shane Ward, UCD School of Biosystems and Food Engineering, leads the €7 million H2020 project AGROCYCLE, which will develop and demonstrate a protocol for the implementation of a 'circular economy' within the agri-food sector.

Professor Aoife Gowen, UCD School of Biosystems and Food Engineering, with Dr Amalia Scannell, UCD School of Agriculture and Food Science, were awarded €1.55 million under the SFI Investigator Programme for the project Multi-scale hyperspectral imaging for enhanced understanding and control of food microbiology.

The UCD Institute of Food and Health continued to strengthen its international links with leading universities such as the University of California, Davis. The second John E Kinsella Memorial Lecture was the highlight of three days of meetings between staff from the two universities on topics including Big Data in Agri-Food and Personalised Medicine and Health.

A Marie Skłodowska-Curie Innovative Training Network (ITN) award to Professor Pat Lonergan, UCD School of Agriculture and Food Science, will see him lead for UCD on an EU joint doctorate in biology and technology of reproductive health (REP-BIOTECH). Professor David MacHugh, UCD School of Agriculture and Food Science, and Professor Stephen Gordon, UCD School of Veterinary Medicine, will use a range of novel genomics approaches to reveal natural blood 'biosensors' for the next generation of bovine tuberculosis diagnostics. Professor Patrick Wall and Professor Seamus Fanning, both of UCD School of Public Health, Physiotherapy and Sports Science, continue to build UCD's reputation for international leadership in food safety.

As part of the Agri-Food Graduate Development Programme (AFGDP), a Management Development Programme was developed for graduates working in the UK and Ireland in all areas of Dawn Meats. Training covered elements of supply chain management, traceability, sustainability, and food safety as well as leadership, management, communication, innovation and lean business principles.

A number of emerging research areas have been developed during 2015/16. These include Precision Agriculture and Bioeconomy. Both are subject to significant funding bids nationally and in the EU.

2. Culture, Economy and Society

UCD is renowned for our contributions in 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

UCD contributed very significantly to the commemorations of the centenary of 1916, with a number of conferences including Globalising

Publication Year	Number of publications in SciVal	Publication Year (5-years)	Field-Weighted Citation Impact (5-years)
2011	2,973	2007 - 2011	1.64
2012	2,910	2008 - 2012	1.64
2013	2,958	2009 - 2013	1.61
2014	2,988	2010 - 2014	1.63
2015	3,091	2011 - 2015	1.62



the Rising, held at the UCD O'Reilly Hall. Several related exhibitions at UCD James Joyce Library, and the acclaimed production and publication of Signatories, a collaborative theatrical project of commemoration featuring eight leading Irish writers, directed by Patrick Mason, and edited by Dr Lucy Collins for publication by UCD Press, were also produced.

2016 also marked the launch of the results of *Preparing for Life (PFL)*, a groundbreaking early childhood intervention conducted by the UCD Geary Institute for Public Policy, in collaboration with Northside Partnership, The Atlantic Philanthropies and the Department of Children and Youth Affairs. Led by Dr Orla Doyle, UCD School of Economics and UCD Geary Institute, the programme had a positive and significant impact across several domains including cognitive development, social and emotional development, and physical wellbeing and motor development.

Professor Porscha Fermanis, UCD School of English, Drama and Film was successful in winning an ERC Starter Grant on Realigning British Romanticism: White Settler and Indigenous Writing in the British-controlled Southern Hemisphere, 1780-1870. Professor Ben Tonra, UCD School of Politics and International Relations was awarded Horizon 2020 funding for the collaborative project Reconsidering European Contributions to Global Justice-GLOBUS. Dr Christine Linehan, UCD School of Psychology was awarded the DG SANCO project entitled European Study on the Burden and Care of Epilepsy (ESBACE). These awards represent a significant proportion of UCD's total EU funding for 2015/16 and are indicative of the opportunities arising from UCD's strength in this research theme.

Mapping the State, an evolving project that visualises the full scale and complexity of the Irish State was launched in early 2016. The map outlines the legislative, judicial, executive and local governmental structures of the state, making use of data developed by researchers in the UCD Geary Institute in the Irish State Administration Database project (www.isad. ie), which is led by Professor Niamh Hardiman, UCD School of Policy and International Relations.

The impact of the research project entitled *Including Citizens in Discussions* over Constitutional Reform, led by Dr David Farrell, UCD School of Politics and International Relations, contributed to the successful establishment of the State's first ever citizen's forum, to bring citizens into the heart of debates over constitutional reforms to improve how our representative system of democracy operates.

In the Financial Times Global MBA Rankings 2016, the UCD Michael Smurfit Graduate Business School is ranked among the Top 20 business schools

in Europe and 78th place worldwide. Feeding into this reputation was the research output from the school, which exceeded 200 publications, including three books.

The interdisciplinary and international character of research at the UCD Sutherland School of Law expanded with the creation of the Environmental Regulation Research Group and the newly established Centre for Human Rights.

In acknowledgement of her contribution in the field of historic landscape scholarship, Dr Finola O'Kane-Crimmins, UCD School of Architecture was awarded the prestigious John Brinckerhoff Jackson Book Award 2016 for *Ireland and the Picturesque*; *Design, Landscape Painting and Tourism* 1700-1840 published by the Yale University Press in 2013.

3. Energy

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.

Energy Highlights

The UCD Energy Institute is advancing and extending its work in energy systems integration across multiple projects. Significant new funding amounting to over €11 million has been secured for the Energy Systems Integration Partnership Programme (ESIPP) which is led by Professor Mark O'Malley, UCD School of Electrical and Electronic Engineering. This multi-disciplinary, multi-institutional research project is developing data handling and strategic planning capability across electricity, gas and water with partners AIB, EirGrid, Ervia, ESB and Glen Dimplex.

The Energy Institute continues to expand its academic capability into new areas and the appointment of two new academic posts in Energy Economics and Intelligent Energy Systems was made possible through the partnership between the Energy Institute, the School of Economics and the School of Electronic and Electrical Engineering.

Professor Federico Milano, UCD School of Electrical and Electronic Engineering, became an Institute of Electrical and Electronics Engineers (IEEE) Fellow arising from his contributions to power systems modelling and simulation.

International activity continues with a number of significant Horizon 2020 wins by Associate Professor Damian Flynn, UCD School of Electrical and Electronic Engineering, and Associate Professor Donal Finn, UCD School of Mechanical and Materials Engineering.

Advanced manufacturing is an area in which UCD is building up its research capabilities and activities. Manufacturing competitiveness has been identified by the national Research Prioritisation Steering Group as a crucial area and the College of Engineering and Architecture is aligning its strategy to address key challenges in this field.

UCD's advanced manufacturing capabilities have been greatly boosted by the appointment of Professor Fengzhou Fang to the UCD School of Mechanical and Materials Engineering. A world renowned expert in advanced manufacturing research and innovation, Professor Fang will lead a cutting edge research programme in UCD, through an investment of €6 million under the Science Foundation Ireland Research Professorship Programme, increasing Ireland's capability as a global centre for micro/nano manufacturing technologies.

4. 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

iCRAG, the Research Centre in Geosciences funded by SFI and industry, was launched by Damien English TD, Minister for Skills, Research and Innovation, in the UCD O'Brien Centre for Science. During the past 12 months, over 40 research and operations staff have been recruited,

with 23 of these staff residing in UCD. With a structure now in place to underpin the centre's future growth, iCRAG will continue to build on strong collaborations with the centre's 55 industry partners, which over the past year have contributed funding of almost €1.5 million.

The UCD Earth Institute and iCRAG had large numbers of highly engaged visitors to their interactive displays in the UCD O'Brien Centre for Science at the UCD Festival 2016. iCRAG's Dr Fergus McAuliffe delivered keynote lectures on science communication throughout Europe and continues to present on RTE One's 10 Things To Know About TV programme.

Professor Jenny McElwain, UCD School of Biology and Environmental Science and UCD Earth Institute, won major SFI Infrastructure funding. The Integrated Plant Phenomics & Future Experimental Climate Platform consists of a state-of-the-art X-Ray CT scanner and six high specification controlled climate chambers. This unique facility will facilitate industry-academia collaboration and enable users to visualise and research three-dimensional structures.

Reconnect, a UCD Earth Institute related project established in 2016, with funding from the Environmental Protection Agency (EPA) will improve the physical and ecological integrity of Ireland's water resources and will enhance compliance with legislative requirements. Reconnect harnesses UCD expertise in Biology and Environmental Science (Associate Professor Mary Kelly-Quinn, Dr Jens Carlsson and Dr Bernie Ball), Civil Engineering (Professor Michael Bruen and Dr John O'Sullivan), Geography (Dr Jonathan Turner) and Planning and Environmental Policy (Dr Craig Bullock). Dr Jens Carlsson, UCD School of Biology and Environmental Science, is partner in a four-year European H2020 project A Trans-Atlantic assessment and deep-water ecosystem-based spatial management plan for Europe (ATLAS).

Health benefits of ecosystems services as a means to supply evidence and tools for developing health-promoting environments or 'healthy places' will be explored in the two-year project *Eco-Health*, funded by the Environmental Protection Agency (EPA) and the Health Services Executive (HSE). Professor Mark Scott, UCD School of Architecture, Planning and Environmental Policy and UCD Earth Institute, will lead this research into the relationship between the natural environment and human wellbeing.





Dr Jonathan Yearsley, UCD School of Biology and Environmental Science and UCD Earth Institute, successfully attracted a SFI Investigator Grant focusing on *Biodiversity, resilience and food security: understanding the role of biodiversity in maintaining food production*. Dr Angela Feechan, UCD School of Agriculture and Food Science and UCD Earth Institute, was awarded a SFI Career Development Award focusing on *Re-establishing Wheat Immunity to Zymoseptoria tritici* in 2016.

The UCD Earth Institute showed an active presence at *Environ 2016*, the 26th Irish Environmental Researchers Colloquium held in Limerick. Contributions included Professor Frank McDermott, UCD School of Earth Sciences and UCD Earth Institute, chairing the session on Climate Change.

5. Health

Healthcare is evolving rapidly, driven by changes in demographics, discoveries in biomedical research, and by emerging technologies. 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. Health research in UCD builds on our expertise in fundamental biomedical science and allied areas of science and technology.

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, dermatology, infectious diseases and rare diseases and consider 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 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

Major multi-investigator awards include a Wellcome Trust/SFI/HRB joint award which will support a minimum of six outstanding medical graduates per year to undertake structured, integrated clinical scientist training, incorporating PhD and specialist clinical training. This prestigious programme will build a cohort of research-active clinician scientists and is being led in UCD by Dr Patrick Mallon, UCD School of Medicine.

US-Ireland Research and Development Partnership programme awards were made to Dr Brian Rodriguez, UCD School of Physics, Professor Catherine Godson and Professor Carel le Roux, both of UCD School of Medicine, working in partnership with Queen's University Belfast, Ulster University, University of Helsinki, the Broad Institute and Florida State University aiming to investigate the complications of diabetes.

SFI Investigators Programme awards made to Professor William Gallagher, UCD School of Biomolecular and Biomedical Science, and Professor William Watson, UCD School of Medicine, aim to develop two clinical tests to segregate low and high-risk tumours. Professor Catherine Godson, UCD School of Medicine, will develop a biomarker profile to facilitate stratified, personalised medicine for chronic kidney disease.

Professor Martin Steinhoff, UCD School of Medicine, received awards from SFI through the SFI-Pfizer Biotherapeutics Innovation Award Programme and through the Strategic Partnership programme to test efficacy and therapeutic benefit for treatment of chronic pain and neuritis and to identify mediators of Recalcitrant Atopic Dermatitis Psoriasis and Hidrenitis Suppurvativa, respectively.

Professor Des Higgins, UCD School of Medicine, received the Kimura Motoo award in Tokyo in international recognition of his significant contributions to the advancement of evolutionary biology, and to the field of molecular phylogeny specifically.

The American Physiological Society (APS) has announced that Professor Cormac Taylor, UCD School of Medicine, is to be presented with the 2017 Takeda Distinguished Research Award by the Society's Gastrointestinal and Liver Physiology Section. The prestigious award is presented annually to an outstanding investigator who is internationally recognised for his/her contribution to physiological research in these areas. This is the first time that this award will be presented to a scientist located outside the United States since it was established in 2007.

Dr Susan Quinn, UCD School of Chemistry, has been recognised by the Royal Society of Chemistry for her work as part of an international research team investigating the relationship between the molecular origins of disease and the absorption of light energy by DNA. Publications in high impact journals included: findings reported in *Nature Cell Biology* by Dr Oliver Blacque, UCD School of Biology and Environmental Science on identifying a gene associated with Joubert syndrome and the mechanism by which it functions in cells; an article in *Circulation* by Dr Fiona McGillicuddy, UCD School of Medicine, on how replacing dietary carbohydrate with monounsaturated fat in otherwise obesogenic diets is better for the cardiovascular health; new findings reported in *Cell Host & Microbe* by Professor Ulla Knaus, UCD School of Medicine, shows how microbiota can adapt to compensate when early warning signaling by epithelial cells in the gut wall fail, threatening the first line of defense against pathogens.

6. ICT

ICT research at UCD advances knowledge and delivers highly trained researchers in fields such as Data Analytics, Artificial Intelligence, the Internet of Things, Smart Systems, Privacy and Security. It also connects these fields with others, addressing applications such as Smart Agriculture, Connected Health, Industry 4.0 and Digital Humanities. UCD has some of the most highly cited researchers worldwide in machine learning and in a number of domains of artificial intelligence.

ICT Highlights

As one of the University's major strategic partnerships, UCD and Intel have agreed to collaborate on education, research, policy and strategy. The partnership will create a UCD/Intel Masters Student Scholarship Programme which will support the education of 64 UCD postgraduate students in Nanochemistry, Computer Science, Electronic and Computer Engineering and Nanotechnology, to address areas of critical skill shortage in the Irish economy.

UCD, through Professor Robert Shorten, UCD School of Electrical and Electronic Engineering, is part of the 74-partner, 15-country Enable S3 consortium which has been successful in H2020. Through Enable S3 UCD, IBM Ireland and German company TWT have formed a joint collaboration to develop a context-aware in-car reasoning system that will help mitigate risk to drivers.

Dr David Coyle, UCD School of Computer Science and Insight Centre for Data Analytics was successful as co-ordinator in securing the Marie Skłodowska Curie Innovative Training Network (ITN) Technology-Enabled Mental Health for Young People - TEAM. The network includes nine funded partners across five countries.

UCD maintains a leading role in Ireland's national data analytics research centres including the Insight Centre for Data Analytics, CeADAR, and the UCD Centre for Business Analytics. Four UCD researchers were awarded funded investigators status in 2016 at the Insight Centre for Data Analytics, Dr Andrew Parnell, UCD School of Mathematics and Statistics, Dr

Pictured (I-r) are Walter Hobbs, Executive Director Investment and Finance, Enterprise Ireland; Gerry Maguire, Partner, Atlantic Bridge; Mary Mitchell O'Connor TD, Minister for Jobs, Enterprise and Innovation; Professor Patrick Prendergast, Provost, Trinity; Professor Andrew Deeks, President, UCD and Mark Horgan, Partner, Atlantic Bridge at the launch of the €60 million University Bridge Fund.

Brian MacNamee, UCD School of Computer Science, Dr Claire Gormley, UCD School of Mathematics and Statistics and Dr Georgiana Ifrim, UCD School of Computer Science.

The first Insight Hackathon took place, which saw seven diverse projects developed including an automatic calorie counter and a player injury passport. The overall winner was Reproducible Research, a project that automated the cleaning and preparation of data.

Innovation

UCD is fully 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 objective 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, the generation of new ventures and the creation of jobs.

One of our key objectives is to improve our capacity to develop competitive spin-out companies and a key development in this regard during the last year has been the establishment of the new €60 million University Bridge Fund. This new Fund, initiated in a joint leadership collaboration by University College Dublin and Trinity College Dublin, is the country's first ever investment fund to invest exclusively in research outputs generated by both universities and all Irish third level institutions and universities.

The Fund, managed by Atlantic Bridge, will be a game changer in creating successful new Irish companies that can grow and scale to compete in global markets. In addition to the two universities, this Fund brings together significant institutional investment from the European Investment Fund, its first cornerstone commitment in an Irish fund of this type having made similar investments in Europe, Enterprise Ireland, as well AIB and Bank of Ireland.

During the year UCD won two awards, a 2016 US-Ireland Research Innovation Award and a 2016 Knowledge Transfer Ireland Award, in recognition of the success of Logentries, described in further detail below.

Entrepreneurial Students

Amid the impact we derive through research and innovation, the greatest impact of the University comes through our students and graduates and the extraordinary contributions they make and will make over the course of their careers.

UCD Startup Stars

During the year UCD Startup Stars, an annual entrepreneurial support programme for UCD undergraduate and postgraduate students who want to work together to build start-ups, was run by NovaUCD, UCD Innovation Academy and UCD Michael Smurfit Graduate Business School. It began with a series of cross-disciplinary workshops and course modules delivered over a 3-month period at UCD Michael Smurfit Graduate Business School and UCD Innovation Academy. Six early stage student ventures, with 14 team members, were then selected to participate in an intensive mentoring programme which took place over a 4-week period at NovaUCD.

The aim of this programme is to assist 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 Skillar was declared overall winner of this year's programme. Skillar is developing Quik, a new mobile application to accelerate the part-time recruitment process. The founders are UCD students, Laurence McNally (Masters, Mechanical Engineering), Stephen Jones (4th year, Chemical Engineering) and Andrew Desmond (Masters, Digital Innovation).

The sponsors of UCD Startup Stars are AIB, Arthur Cox, Deloitte, Ericsson, Goodbody Stockbrokers, Local Enterprise Office—Dún Laoghaire-Rathdown County Council and Xilinx.

2016 BT Young Scientist Business Bootcamp

The aim of the BT 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 seventh year, the 4-day 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. Participating students were selected in January from all the secondary school students who competed in the 2016 BT Young Scientist and Technology Exhibition.

Partnering with Industry

UCD has a strong track record of working with industry, seeking 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.

IBM and UCD Research and Software Collaboratories

During the year IBM and UCD announced the establishment of two new collaboratories, both of which will be based at the UCD O'Brien Centre for Science. The research collaboratory will allow scientists from UCD and IBM Research–Ireland to work closely together on technologies for the next generation of smart and sustainable cities. The collaborative research programme will focus on applying cognitive computing technologies to augment human decision making and delivering the next level of advanced collaboration between people and computers.

Applications will cross a wide-range of disciplines with global impact including agriculture, connected cars, healthcare management and personalised care, smarter energy and transportation. The new software development collaboratory will involve software developers from IBM Ireland Lab using cognitive computing technologies in collaboration with UCD researchers.

The research programme at this collaboratory will focus on using advanced analytics technology to interpret, in real-time, the vast volume of data and patterns captured from patients via smart and embedded medical devices. Applications arising from such interpretations aim to transform collaborative decision-making conversations between doctors and their patients.

Innovation Partnership to Enhance Food Quality and Safety

A new 3-year Innovation Partnership programme in food quality and safety was launched during the year at UCD. The €1.7 million Enterprise Ireland and industry-funded programme, Sequencing Alliance for Food Environments (SAFE), aims to develop a new predictive software toolbox to enhance food quality and safety approaches, nationally and with global reach, using environmental intelligence data. SAFE is a unique partnership between the UCD Centre for Food Safety; six leading food and nutrition companies; Dairygold, Dawn Farm Foods, Glanbia, Kerry, Mead Johnson Nutrition and Nutrition Supplies, along with Creme Global, experts in predictive intake modelling software.

SAS centre at NexusUCD

SAS, the global leader in business analytics, announced the expansion of its operations in Ireland with the opening of a new Inside Sales and Customer Contact Centre. The expansion will create 150 jobs over three years, equating to an investment of around €40 million. The move will see the workforce increase six-fold and significantly reinforce SAS' presence in the region. The new centre, to be located initially at NexusUCD, will support sales of data analytics software into markets across Europe, Middle East and Africa.

Commercialisation of Research Outputs

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

During the year Robert-Jan Smits, Director-General for Research and Innovation at the European Commission visited NovaUCD. Enterprise Ireland also held one of its monthly board meetings at NovaUCD. In addition, several international delegations, from countries including Australia, Nigeria, South Africa and 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 (NCAD) 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.

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 73 inventions. In addition 27 priority patent applications were filed across areas of engineering, information and communication technology, and life sciences. 20 licence agreements were also concluded by UCD with a range of indigenous and international companies and 3 new UCD spin-out companies incorporated.

During the year UCD's technology transfer office at NovaUCD launched a new online licensing platform, incorporating Stripe, to accept, manage, and track online credit card payments, to promote and license technologies developed at the University. The platform provides three options to potential licensees to access UCD technologies, 'buy it now', 'obtain a non-commercial licence' and 'make an enquiry'. The technologies included under the 'buy it now' option can be broadly classified as research tools, such as cell lines, vectors or certain software, with relatively low inherent value.

Until now members of UCD's technology transfer team spent significant time negotiating bespoke licences for such technologies. In order to streamline this process UCD partnered with Aficionado Technologies, a UCD spin-out company, to develop and launch the UCD Online Licensing Platform to license such technologies on a non-exclusive

The UCD Innovation Academy has appointed an international advisory board to advise on its future direction and growth.

Pictured (l-r) are Colm Lyon, founder and CEO, Fire Financial Services and founder and former CEO, Realex Payments; Professor Suzi Jarvis, Founding
Director, UCD Innovation Academy; Gay Haskins, former Dean of Executive Education and CEO, Saïd Business School, University of Oxford; Raomal
Perera (Chair), adjunct Professor of Entrepreneurship, Insead Business School; and Dr Syahira Hamidon, Head of Entrepreneurship Unit, Malaysian Ministry
of Higher Education.



basis, to multiple users in a seamless manner. UCD has now licensed the technology behind the platform to Aficionado, enabling it market the platform to other technology transfer offices in Ireland and internationally.

UCD Commercialisation Programmes

During the year 14 UCD researchers completed 3 separate 1-day UCD Innovation Sprint programmes, held in Data Science, Internet of Things and Insight research areas, delivered at NovaUCD. The 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, 40 researchers completed 2 commercialisation bootcamps delivered at NovaUCD. Participants represented a total of 29 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 2015 Start-Up Award

Phision Therapeutics, an early-stage life sciences venture, was declared overall winner of the 2015 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. Phision Therapeutics is developing proprietary therapeutic drugs to more effectively treat vision loss to prevent blindness associated with ageing or diabetes. Phision Therapeutics is a new venture emerging from research carried out over several years by founder Dr Breandán Kennedy with Dr Alison Reynolds, UCD School of Biomolecular and Biomedical Science and UCD Conway Institute.

NovaUCD 2015 Innovation Award

The 2015 NovaUCD Innovation Award was presented to Professor Eoin Casey and Dr Eoin Syron, both researchers in the UCD School of Chemical and Bioprocess Engineering, and co-founders of OxyMem, in recognition of the success and impact which this UCD spin-out has achieved to date in the international, multi-billion euro wastewater treatment industry.

Acquisition Success

During the year two UCD spin-out companies, Equinome and Logentries, were acquired.

Plusvital, the Irish equine nutrition company established in 1975, acquired the leading bloodstock genomic testing company, Equinome. The newly expanded Plusvital will substantially invest in the development of

novel equine genomic tests, innovative nutraceuticals and other equine performance and health products. The existing world-class research team, led by co-founder, Dr Emmeline Hill, will be strengthened with the recruitment of additional highly-qualified researchers and sales and marketing staff. The combined business will employ over 35 highly qualified scientists and professionals by the end of 2017. Equinome, headquartered at NovaUCD, was co-founded in 2009 by Dr Hill, UCD School of Agriculture and Food Science and Jim Bolger, the renowned Irish horse trainer and breeder.

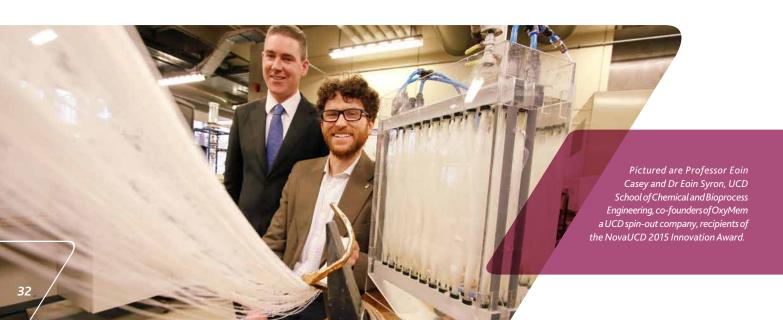
Rapid7 Inc. (NASDAQ:RPD), a leading US provider of security data and analytics solutions, acquired RevelOps Inc., t/a Logentries, a leading provider of machine data search technology. Rapid7 acquired Logentries for an aggregate purchase price of approximately \$68 million, consisting of approximately \$36 million in cash and \$32 million in Rapid7 equity. With the addition of Logentries' world-class, cloud-based log management and search, Rapid7 will enable information security teams to solve a full range of security challenges, deeply investigate incidents, and more efficiently achieve their compliance requirements. Logentries, which had secured over \$11 million in funding, was co-founded in 2010 by DrTrevor Parsons and Dr Viliam Holub as a spin-out from UCD's Performance Engineering Laboratory in the UCD School of Computer Science. On acquisition Logentries served more than 3,000 customers in over 65 countries, across a diverse set of industries, and had approximately 70 employees.

Fundraising Success

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

Foundry Innovation & Research 1 (FIRE1) closed a Series B financing round of \$7.5 million from existing investors, including leading venture capital firms Lightstone Ventures and New Enterprise Associates, as well as Medtronic. FIRE1, the 15th medical device company founded by The Foundry, is developing a novel remote monitoring device, is headquartered at NexusUCD. The company also announced the appointment of Dr Conor Hanley, a UCD graduate, as president and CEO. Dr Hanley previously held senior management positions with ResMed and was a co-founder of the UCD spin-out BiancaMed.

Neuromod Devices, the medical device company founded by Dr Ross O'Neill, raised €5.5 million in Series A Funding. The company, which specialises in the treatment of chronic tinnitus, secured the funding from international life sciences venture capital fund Fountain Healthcare Partners. The investment will be used to further enhance scientific and clinical understanding of its bi-modal neuromodulation device,



mutebutton®, and commence US clinical trials of the device. This marks a significant milestone for Neuromod, which is headquartered at NexusUCD, and brings the total raised by the company to date to over €8 million.

OncoMark, a UCD spin-out headquartered at NovaUCD, was selected for €2.7 million in funding over 2 years, through the Horizon 2020 SME Instrument Phase 2, to commercially develop a new diagnostic test for breast cancer patients. The company, which currently employs 10 people, plans to double its staff numbers over the next 2 years. It was co-founded by Professor William Gallagher and Steve Penney as a spin-out from the UCD School of Biomolecular and Biomedical Science.

OxyMem Ltd, a UCD spin-out headquartered in Athlone, Co Westmeath, secured an investment from the Dow Chemical Company (NYSE: DOW). The investment will accelerate the commercialisation of OxyMem's wastewater treatment technology, the Membrane Aerated Biofilm Reactor (MABR). The MABR technology has the potential to bring wastewater treatment closer to energy neutrality by reducing energy consumption for aeration by up to 75%. OxyMem was co-founded by Professor Eoin Casey, Dr Eoin Syron and Wayne Byrne as a spin-out from UCD's School of Chemical and Bioprocess Engineering.

Other Success

UCD Spin-Out named Best Early Stage Company in Ireland

SiriusXT, a UCD spin-out, was named Best Early Stage Company in Ireland, at the final of the 2015 InterTradeIreland All-Island Seedcorn Investor Readiness Competition. SiriusXT, co-founded by Dr Ken Fahy, Dr Fergal O'Reilly and Dr Paul Sheridan, as a spin-out from the UCD School of Physics, has spent eight years developing the technology for its soft x-ray microscope called SXT. This is the first soft x-ray microscope of its kind in the world; it is a benchtop system that allows researchers to produce images in their own labs. Their product takes a powerful laser to make a little fireball as hot as the centre of the sun and about a tenth of the width of a human hair in diameter. This fireball produces the kind of light that allows them to illuminate single cells or tissue samples and produce beautiful 3D images of cells that cannot be produced any other way.

UCD Innovation Academy

This year saw the highest number of students engaging with the UCD Innovation Academy to date. The newly expanded undergraduate general elective offerings, Introduction to Creative Thinking and Entrepreneurial Endeavour, grew to accommodate 248 students. A total of 444 students participated in the Postgraduate Certificate in Innovation, Entrepreneurship and Enterprise, funded by the Higher Education Authority's Springboard initiative, which was delivered in Athlone, Cork, Drogheda, Dublin, Galway, Waterford and Wexford. Modules in Creative Thinking and Innovation and Social Entrepreneurship were delivered to 64 PhD students, including students on the joint UCD-TCD-QUB Graduate Certificate in Innovation and Entrepreneurship.

In addition 64 students from four MSc programmes across the College of Science and College of Health and Agricultural Sciences participated in a pilot online module in Creative Thinking. During the year, 34 professional educators, including UCD academic staff, participated in the Professional Certificate and Diploma for Entrepreneurial Educators designed to equip participants with the skills and approaches to foster entrepreneurial thinking in their students.

The UCD Innovation Academy continued to grow its engagement with industry, collaborating with 73 organisations across its programmes and modules.

180 UCD undergraduate students also successfully took part an Industry Immersion Day hosted by Deloitte at their offices in Dublin. Working in



Pictured are UCD students and founders of Skillar, Stephen Jones, Andrew Desmond and Laurence McNally, winner of the 2016 UCD Startup Stars Programme.

multidisciplinary teams students applied the tools and techniques that they had learned at the UCD Innovation Academy to challenges facing the professional services industry. Professor Mark Rogers, Registrar and Deputy President, UCD and Brendan Jennings, Managing Partner, Deloitte Ireland attended this event.

Building on the success of the Professional Diploma for Entrepreneurial Educators, the UCD Innovation Academy was invited by the Ministry of Higher Education in Malaysia to design and co-deliver a pilot Entrepreneurial Educator Enhancement Programme (3EP) for 102 Malaysian academics from 22 public sector higher education institutions. The closing ceremony was attended by Datuk Mary Yap Kain Ching, Deputy Minister for Education and H.E. Eamon Hickey, Irish Ambassador to Malaysia.

The UCD Innovation Academy established an International Advisory Board to steer its international expansion. Chaired by Raomal Perera (Entrepreneur and Adjunct Professor at INSEAD), its members are Gay Haskins (Former Dean of Executive Education and CEO of the Saïd Business School, University of Oxford), Colm Lyon (Founder and CEO of Fire Financial Services Limited, Founder and former CEO of Realex Payments) and Datin Dr Syahira Hamidon (Head of the Entrepreneurship Unit, Ministry of Higher Education, Malaysia).

During the year the UCD Innovation Academy also hosted a number of academic delegations from Australia, China, Denmark, Switzerland and the United States.

Professor Suzi Jarvis, founding director, presented the work of the UCD Innovation Academy at the launch of the UCD Cantillon Research Centre for Entrepreneurship, Design and Innovation and also was interviewed for the KPMG Innovation Monitor Report for 2015 representing the education sector. Barbara Diehl, Executive Director, UCD Innovation Academy was also invited to serve as a mentor on the 'Leaders in Innovation' Fellowship Programme by the Royal Academy of Engineering, UK.

The UCD Innovation Academy also hosted a series of events for UCD staff and students and the wider community and guests included Lord David Puttnam, Ireland's Digital Champion, Professor Paul Reville, Harvard Education Re-Design Lab and Una Halligan, Chair of the Expert Group on Future Skills Need.

UCD College of Arts and Humanities





Professor Maeve Conrick College Principal

Director of Graduate School Associate Professor Regina Uí Chollatáin

Vice-Principal for Teaching and Learning Associate Professor Rosario-Maria Hernandez

Vice-Principal for Research, Innovation and Impact Professor Porscha Fermanis

> Dean of Arts Associate Professor Marie Clarke

UCD College of Arts and Humanities began the year by embedding its new title and structure and working to implement and enhance the Strategic Plan in relation to the College's constituent Schools: UCD School of Art History and Cultural Policy, UCD School of Classics, UCD School of English, Drama and Film, UCD School of History, UCD School of Irish, Celtic Studies and Folklore, UCD School of Languages, Cultures and Linguistics, and UCD School of Music. The College continues to build on its key strengths in research and reputation by expanding our quality programmes globally, highlighting the achievements of students and alumni, engaging with the local, national and international community, with the aim of strengthening our disciplines and further developing our world-class facilities.

The College's excellent reputation in research and scholarship is exemplified by the fact that three of the subjects offered are ranked within the top 1% by the 2016 QS World University Ranking by subject. In attracting international and national external funding, the College would like to acknowledge the support from a wide range of funders, including the US National Science Foundation, the Wellcome Trust, the Department of Cultural Affairs in Libya, the European Commission, the Association for Spanish and Portuguese to Enterprise Ireland, the Irish Government, the Royal Irish Academy and Irish Research Council.

Amongst numerous research projects and initiatives, Associate Professor Porscha Fermanis was awarded an ERC Starting Grant for her work on British Romanticism in the British-controlled Southern Hemisphere; Associate Professor Lynda Mulvin received the DG EAC award for a Creative Cultures: Connecting Early Medieval European Collections (CMEC) project. IRC New Horizons Project Grants were awarded to: Associate Professor Marc Caball for his work in mapping readers and readership in Dublin 1826-1926: a new cultural geography, and Dr Emilie Pine for her work on Data Analytics and Digital Arts in understanding the cultural memory of Ireland's institutional past. Initiatives in terms of early career researchers are exemplified by the attraction of IRC postdoctoral and postgraduate scholarships by the majority of schools within the College during the year.

The schools also hosted a number of international conferences throughout the year such as the 9th Celtic

Conference in Classics, In the Midst of Life we are in Death, Finding Irish in Australia and Torthaí na Réabhlóide, in conjunction with the Pearse Museum and the Gaelic League. The School of Art History and Cultural Policy celebrated 50 years with students past and present in November and hosted a Distinguished Lecture Series in spring.

Our Faculty continue to receive recognition for their achievements nationally and internationally. Professor Robert Gerwarth and Professor Harry White were elected to the Academia Europaea. Professor Diane Negra was elected to the Royal Irish Academy. Our former College Principal, Professor Mary Daly, was awarded the DLitt honoris causa by the National University of Ireland. A number of women in the College took the opportunity to develop their leadership potential by participating in the Aurora Leadership Development Programme for Women in 2015/16, including Ms Elaine Cregg, Dr Jaime Jones, Dr Emilie Pine and Dr Gillian Pye.

A major initiative this year has been to review our curriculum and teaching, in particular with a view to considering the future direction for Arts and Humanities undergraduate degree programmes; and to develop our existing graduate programmes and new collaborative programmes globally such as our collaboration with Minzu University of China.

Students of the College achieved notable success in international competitions - for example: Michael Paye received the Fulbright-NUI student award to Princeton University. The College is looking forward to working with the newly-recruited graduate students and Global Excellence scholars from China, East and South-East Asia and North America. We continue to engage with our alumni whose professional achievements are a source of inspiration to our current students, for example Jim Sheridan, director and six-time Oscar nominee, who was awarded the UCD Alumni Award for Arts. We were pleased to note Oscar nominations for the films Room, from the novel by Emma Donoghue, and Brooklyn, adapted from Colm Tóibín's novel. Colm is currently an Adjunct Professor in the UCD School of English, Drama and Film.

The College continued, in collaboration with the University and the national and global community, to make a major contribution to the UCD Decade of Centenaries programme. In commemorating 1916, the College and schools were involved in academic and public initiatives, including publications such as the Years of Turbulence: The Irish Revolution and its aftermath, A Nation and Not a Rabble: The Irish Revolutions, 1913-23, Irish Days, Indian Memories: V. V. Giri and Indian Law Students at University College Dublin, 1913-1916, The Irish Parliamentary Party at Westminister, 1900-1918, The Vanquished: Why the First World War failed to End, Signatories, the ten-part

1916 supplement collection by UCD, in partnership with the Irish Independent. Professor Frank McGuinness's Observe the Sons of Ulster Marching towards the Somme, was produced by the Abbey Theatre with a special performance at the Somme battlefield as part of the official commemoration of World War I. The College contributed to events such as *Reading 1916*, Torthaí na Réabhlóide, Globalising the Rising: 1916 in Context and After Empire.

In April 2016, an extraordinary piece of theatre, literature and performance was premiered in Kilmainham Gaol to excellent reviews and extensive press coverage. Described as 'magical' and as 'an ambitious and significant project', Signatories was written by eight world-class Irish writers including largely faculty and/or graduates of the College: Frank McGuinness, Marina Carr, Thomas Kilroy, Emma Donoghue, Joseph O'Connor, Éilis Ní Dhuibne, Hugo Hamilton and Rachel Feehily. The publication by UCD Press was edited by Dr Lucy Collins, UCD School of English, Drama and Film. Following a sell-out tour this year, *Signatories* will return to the Axis and Olympia Theatres in September/October 2016.

The UCD Choral Scholars, directed by Dr Desmond Earley, UCD School of Music, featured in the centenary celebrations in March of this year, performing on St Patrick's Day at Áras an Uachtaráin, by special invitation of the President of Ireland, and for RTE's Centenary special. The group's YouTube video for 'Mo Ghile Mear' has over 1.5 million views. The UCD Choral Scholars' CD Invisible Stars was released on Signum Records, a major label for classical choral music, under the artistic directorship of Dr Desmond Earley, UCD School of Music, with critical acclaim - the album was #1 on the classical charts in the UK and Ireland, and reached #2 in the classical charts in the USA.

UCD College of Arts and Humanities consists of seven schools*:

UCD School of Art History and Cultural Policy Head of School Associate Professor Lynda Mulvin

UCD School of Classics *Head of School*Dr Alexander Thein

UCD School of English, Drama and Film Head of School Professor Danielle Clarke

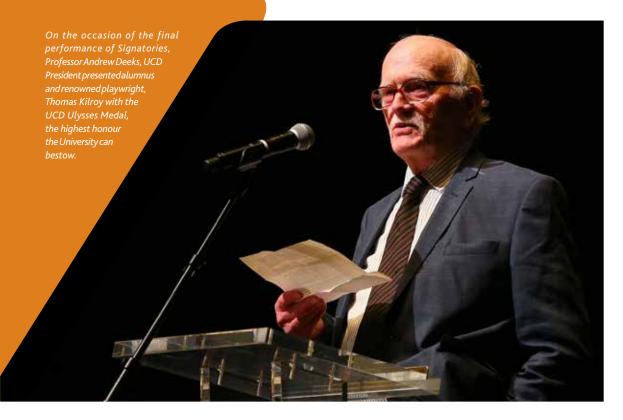
UCD School of History *Head of School*Associate Professor
Tadhg Ó hAnnracháin

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

UCD School of Languages, Cultures and Linguistics Head of School Associate Professor Georg Grote

UCD School of Music Head of School Dr Jaime Jones

*As of September 2015





AntOllamh Comhlach Regina Uí Chollatáin, Ceann Scoil na Gaeilge, An Léinn Cheiltigh agus an Bhéaloidis, UCD; an tOllamh Jerry White, Cathaoir an Léinn Eorpaigh í gCeanada, Ollscoil Dalhousie, Ceanada; agus an tOllamh Comhlach Meidhbhín ní Úrdail, Ceann



The College and schools also made a substantial contribution to the inaugural UCD Festival in June, including the Newman Gala event exploring 'Between the Rising and the Somme: interpreting 1916 in 2016'. The College and schools welcomed a number of colleagues arising from our collaborative initiatives including: Anne Enright, the first Laureate for Irish Fiction (Arts Council, Irish Times and New York University); Lia Mills, Writer in Residence (Arts Council); Dominic Thorpe, Artist in Residence (Cultúr Lab); and Paula Meehan, Ireland Professor of Poetry (The Ireland Chair of Poetry).

The College welcomed the establishment of the UCD School of Art History and Cultural Policy and NCAD Centre for Creative Arts and Critical Cultures, under the co-direction of Associate Professor Emily Mark-Fitzgerald, UCD School of Art History and Cultural Policy and Professor Jessica Hemmings, NCAD. Arising from the NCAD-UCD Strategic Alliance project, the Centre seeks to identify research and teaching synergies,

and promote collaborations between the two institutions, in the area of Creative Arts and Critical Cultures.

The development of the Ulysses Centre, a partnership between UCD and the National Library of Ireland, to celebrate Ireland's renowned literary heritage, inspiring the next generations with the urge to create, read and write, continues with the University now granted planning permission for the development of the Ulysses Centre at Newman House in the heart of Dublin at St Stephen's Green.

Maere Cowaich

Professor Maeve Conrick Principal

An Oscar nomination for alumna Emma Donoghue for the screenplay of her novel, Room, with an Oscar for yest actress and two other nominations

Three Oscar nominations for Brooklyn, based on alumnus Colm Tóibín's novel.

UCD Choral Scholars released their debut international recording on Signum Records in December. Invisible Stars is an enchanting collection of traditional and contemporary choral music from Ireland and Scotland and features arrangements and new compositions by some of Ireland's most celebrated composers.









Message From New Principal

I am delighted and honoured to have been appointed Principal, UCD College of Arts and Humanities. I would like to thank Professor Maeve Conrick for her sustained leadership of the College and its development over the previous years. The College has an international reputation for excellence across a range of disciplines and activities. Our research is world-leading and we look forward to a series of events organised by the College, in collaboration with UCD Research, to showcase the broader cultural and social impact

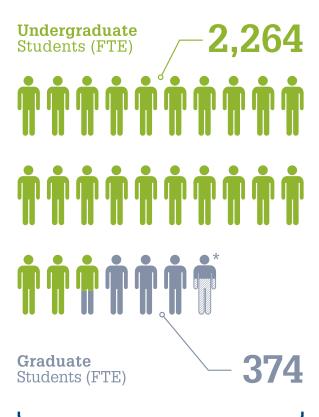
of our research across the range of disciplines represented by the schools. I am looking forward to supporting the schools in expanding further their inter- and transdisciplinary engagement both within Ireland as well as through strategically focused international partnerships and collaborations. The College is committed to research-led innovative teaching and to the ongoing development of the undergraduate and graduate curriculum in ways which speak to the future success and influence of students in the Arts and Humanities in national and global contexts. The next few years promise to be an exciting and creative time for the College's subject disciplines in terms of research, knowledge and learning, innovation and engagement. The development of the Ulysses Centre at Newman House as a showcase for literature and the arts will be an appropriate reflection of the excellence of UCD in these disciplines and creative practices.

Professor Sarah Prescott Principal

Concept imagery of the Ulysses Centre at Newman House,



UCD Students in Ireland



Total Students

2,638

Overseas Operations

Undergraduate Students (FTE)







UCD College of Business









Professor Ciarán Ó hÓgartaigh College Principal/ Dean UCD College of Business

2015/16 marked the first year of the 2020 & Beyond Strategy for UCD College of Business. We have been providing excellent business education though the Bachelor of Commerce degree since 1908 and today the College of Business continues to play a leading role in helping UCD achieve its objectives and our 2020 & Beyond Strategy outlines how we will continue to do that in clear and measurable ways.

Our Structure

- UCD Lochlann Quinn School of Business offers undergraduate courses, including the Bachelor of Commerce (BComm), BComm International, the BSc in Economics and Finance, BSc in Business Analytics and more, to approximately 1,900 students per year.
- UCD Michael Smurfit Graduate Business School offers postgraduate courses, including the MBA and a wide range of MSc's in business, to approximately 1,300 students per year.
- UCD Smurfit Executive Development offers a wide range of open enrolment and customised programmes to approximately 1,600 participants per year.
- UCD Business International Campus portfolio provides UCD College of Business undergraduate and graduate programmes on partner campuses in Singapore, Hong Kong and Sri Lanka. These programmes attract over 4,700 students per year.

Our Mission:

To Educate, Support and Inspire

To support the development of Irish and international society by educating future business leaders to the highest quality international standards.

- To inspire and facilitate students to achieve their full potential and maximise their positive contribution to business and society, both in Ireland and globally.
- To help business better serve society globally through the provision of innovative and impactful research.

Our Vision: A Future on the Global Stage

- To be a global leader in business education and research, consistently delivering the highest international quality standards and being recognised as one of the world's top 50 business schools.
- To excel and innovate with a distinctive international edge in globally relevant areas such as digital business and the future of financial services.
- To continuously redefine how business is taught and learned to inspire the next generation of leaders in the world and for the world.

Our Defining Values

Ambition, Integrity and Courage.



MBA 50 Gala Dinner Event 2016: l-r Prof Anthony Brabazon, Director UCD Smurfit School; Grainne Barron, CEO and Founder, Viddyad; and Prof Andrew Deeks, UCD President.

Our Strategy

We have four pillars on which our strategy is based:

- A commitment to research, innovation and impact on business and society: We will build a strong research foundation that will be internationally acknowledged and respected, particularly in the thematic areas of digital business and financial services.
- Transformational learning: We will cultivate informed, agile, critical and ethical thinkers and doers. We will create opportunities to learn from diverse perspectives in diverse settings, through a rich variety of programmes, teaching and research. By doing so, we will enable transformational learning for our students and society.
- In the world: We will enhance our relationships with leading corporates, NGOs and the public sector by being the partner of choice in mutually beneficial relationships built around research, thought leadership and teaching.

For the world: We will forge a collaborative and vital community by working together to nurture graduates, faculty and staff to be ambitious and courageous in contributing to business and society and to act with integrity at all times.

UCD College of Business continues to attract the best of local and international students. We attribute this success to our most important resources - our current students, faculty and staff. New faculty appointments to key subject areas have enabled us to offer new and interdisciplinary

standards of our faculty, staff and students are reflected in our accreditations and rankings.

programmes, progress our research capabilities, and address important global problems. The high

UCD Michael Smurfit Graduate Business School.

Accreditation and Rankings

Our rankings and accreditations benchmark us among the best business schools in in the world. Rankings with strict objective criteria such as the Financial Times and the Economist are the only truly independent and internationally respected classifications by which the world's top schools are compared on a global basis. Our MSc in Finance and MSc in International Management are both ranked in the FT Global top 50. Our full-time and executive part-time MBAs and our Executive Education Open Enrolment programme are all ranked in the FT Global top 100.

UCD School of Business remains one of an elite group of schools worldwide to hold the 'triple crown' of accreditations - AACSB (Association to Advance Collegiate Schools of Business), EQUIS (European Quality Improvement System) and AMBA (Association of MBAs).

We are also the only Irish member of leading business school alliances - CEMS (Global Alliance in Management Education) and GNAM (Global Network for Advanced Management).





Our Investment in Building a Better Future

We will invest an additional €65m over the next 5 years in delivering our strategy, this will be invested in:

- World Class Expertise
 Establish academic chairs and professorships filled by internationally minded faculty in the areas where we are well positioned to lead. Develop programmes shaped and informed by our strengths and major global trends, and capitalising on UCD's wealth of expertise and worldwide partnerships.
- The Future of Learning
 'The Future of Learning' project, enabling learning that transcends boundaries and supporting the expansion of our international portfolio. A next-generation virtual learning technology platform and dynamic, blended course content.

 A world-class executive development provision and facilities.



Leaders of the Future
 Investing in scholarships to continue to attract exceptional students from around the world. This will be fully funded from non-exchequer sources through a mix of operating surplus, income from overseas operation, sponsorships and gifts.

Research

The UCD College of Business will continue to grow its global reputation for contemporary and impactful research. In the research rank published as part of the Financial Times Global MBA Rankings 2016, the UCD Michael Smurfit's Graduate Business School's research is ranked among the top 20 business schools in Europe and 78th place among all business schools worldwide.

Feeding into this reputation for contemporary and impactful research, output from our research intensive faculty this past year comprised over 200 publications, which include three books crossing the areas of:

- Corporate Governance and Ethics: Shades of Grey: Directors'
 Dilemmas by N. M. Brennan; Institute of Chartered Accountants of Scotland.
- Human Resource Management & Employment Relations:
 Managing Workplace Conflict: Alternative Dispute Resolution
 in Ireland by Teague P., Roche W.K., Gormley T. Currie D.;
 Institute of Public Administration.
- Digital Business & Advanced Analytics: Natural Computing Algorithms by Brabazon A., O'Neill M., McGarraghy S.; Springer.

The UCD Cantillon Research Centre for Entrepreneurship, Design and Innovation, led by Professor Rory O'Shea, was launched in June 2016, and has been established to create and disseminate research-based knowledge of international significance and build reputation in innovation-based entrepreneurship and design thinking.

Faculty enjoyed a number of competitive funding wins this past year: Dr Cal Muckley received an Enterprise Ireland Innovation Partnership with Fidelity Investments as part of the Financial Services Governance Risk and Compliance Technology Centre (GRCTC), which is hosted by UCD with NUI Galway.

Dr Rasher Chowdhury and Dr Thomas Conlon both won Irish Research Council New Horizons grants.

Professor Ronan Powell, Professor Roland Erne and Dr James Sweeney also successfully won funding from the Irish Research Council in the form of a Research Project Grant, a Government of Ireland Postgraduate Scholarship, and a New Foundations award respectively.

Professor Michael O'Neill received funding from Fidelity Investments as part of the Science Foundation Ireland LERO Centre for Software.

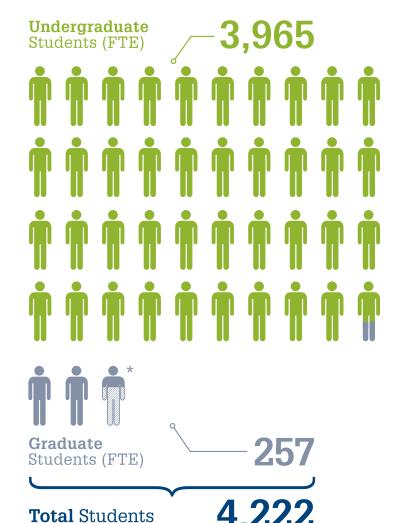
Enterprise Ireland Innovation Vouchers were won by Professor Damien McLoughlin and Dr James Sweeney.

Finally, I would like to thank all the members of the UCD College of Business; faculty, staff and students, whose dedication and hard work have ensured an excellent performance and enhanced reputation during 2015/16, and I look forward to progressing our 2020 & Beyond Strategy in the years ahead.

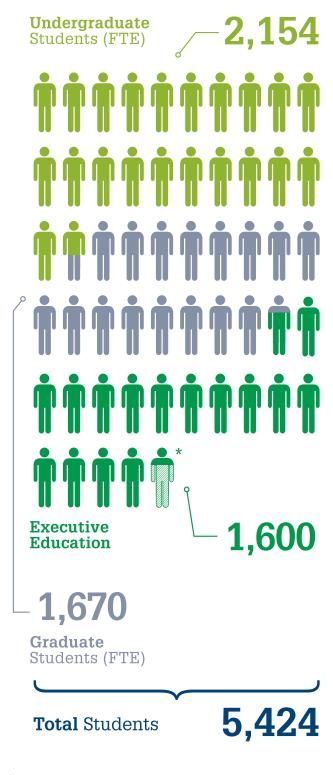


Professor Ciarán Ó hÓgartaigh College Principal/Dean UCD College of Business

Overseas Operations



UCD Students in Ireland





Research Awards





UCD College of Engineering and Architecture





Professor David FitzPatrick College Principal/ Dean of Engineering

Dean of Architecture Professor Hugh Campbell

> Associate Dean of Architecture Mr Dan Sudhershan

Vice Principal for Internationalisation **Associate Professor** Mark Richardson (as per 1 September 2015)

College Developments

On 1 September 2015 the College of Engineering and Architecture was restructured to include the additional disciplines of Planning and Environmental Policy which reside in the newly formed UCD School of Architecture, Planning & Environmental Policy. School research spans a wide range of themes and is Ireland's leading centre of excellence for research into design and policy for the built and natural environments. I am delighted to report that multiple award winners Sheila O'Donnell and John Tuomey, both graduates and faculty of this School, won the 2015 Brunner Memorial Prize in Architecture. This prize recognises the work of an architect of any nationality "who has made a significant contribution to architecture as an art".

Research, Innovation and Impact

Over €27.7 million in new grants were registered by the College this year. During this period Professor Fengzhou Fang, recruited by the School of Mechanical & Materials Engineering, was awarded over €6 million in funding under SFI's Research Professorship Programme.

Members of UCD School of Electrical & Electronic Engineering and UCD School of Chemical and Bioprocess Engineering are involved in leading the large-scale Energy Systems Integration Partnership Programme (ESIPP) which received €5.5 million from SFI, together with €5.5 million from five industry partners; AIB, EirGrid, Ervia, Glen Dimplex and ESB; along with a philanthropic contribution from David O'Reilly, former Chairman and CEO of Chevron Corporation, and current Chair of the UCD Energy Institute Board.

SFI awarded 24 projects nationally under the Investigator Programme 2015. Seven of these awards were to UCD and three of which, totalling €4.46 million, are based in this College. Awardees include Professor Eoin Casey, Associate Professor Aoife Gowen and Professor Federico Milano.

European Commission funding, over a range of programmes, represents 11% of new grants registered this financial year. It includes two newly launched collaborative projects that are being co-ordinated by UCD:

- AgroCycle, led by Professor Shane Ward, UCD School of Biosystems and Food Engineering, is an €8 million project focusing on the 'circular economy' in the context of the agri-food industry and comprises 26 partners from across Europe and three from China.
- iSCAPE, led by Dr Francesco Pilla, School of Architecture, Planning and Environmental Policy, is a €5.8 million project focusing on the important challenges society is facing regarding both air quality / pollution and climate change. It has 15 partners from seven countries and is a highly interdisciplinary consortium.

Dr Arturo González, UCD School of Civil Engineering, also launched a €3.7 million EU Horizons 2020 Marie Skłodowska-Curie Initial Training Network entitled 'Training in Reducing Uncertainty in Structural Safety' (TRUSS).



Professor Da-Wen Sun, UCD School of Biosystems and Food Engineering, was selected for the prestigious Thomson Reuters 2015 list of Highly Cited Researchers. This list identifies the world's most influential contemporary researchers across 21 scientific fields. Associate Professor Finola O'Kane, UCD School of Architecture, Planning and Environmental Policy won the 2016 John Brinckerhoff Jackson Book Prize for her book Ireland and the Picturesque: Design, Landscape Painting and Tourism 1700-1830 (Yale UP).

OxyMem Ltd, a spinout from UCD School of Chemical & Bioprocess Engineering, is the only Irish company listed in the 2015 Global Cleantech 100; a comprehensive list of private companies with the highest potential to make the most significant market impact over the next five to ten years. OxyMem is commercialising an innovative solution to reduce costs for wastewater treatment - the Membrane Aerated Biofilm Reactor (MABR). Co-founders of OxyMem Ltd Professor Eoin Casey and Dr Eoin Syron were also awarded the NovaUCD 2015 Innovation Award.

APC Ltd, another spinout from this School announced 100 jobs and welcomed An Taoiseach, Enda Kenny TD, to open its new state-of-the-art research facility in Dublin. APC is an innovator in process research solutions for the pharmaceutical industry and helps global clients accelerate the development of their medicines for a wide range of conditions.

In recognition of their achievements, two members of the College, Professor Debra Laefer of UCD School of Civil Engineering and Associate Professor Aoife Gowen of UCD School of Biosystems and Food Engineering, are amongst eight female scientists and engineers selected and honoured by the Royal Irish Academy to be subjects of specially-commissioned portraits to appear on the RIA Women on Walls project. The project is part of a RIA initiative to encourage the promotion of women and their achievements in the workplace.

Vice Principal for Teaching and Learning Associate Professor Amanda Gibney

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

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 Hugh Campbell

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

UCD School of Civil Engineering

Head of School Associate Professor Mark Richardson (per 1 September 2015)

Associate Professor Aoife Ahern (took up the Interim Headship from April 2016)

UCD 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 2015





2015 UCD Engineering Graduates Association (EGA) Gold Medal Winners: John Waldron, Chemical Engineering (father of Conor); Richard Jenkinson, Structural Engineering with Architecture; Darragh Hanlon, Civil Engineering; Eanna McHugh, Biosystems Engineering; Niall Donnelly, Mechanical Engineering; Professor David FitzPatrick, UCD Dean of Engineering; Shane Gubbins, Engineering with Business; PJ Rudden, EGA President; Irene Danti Lopez, Electrical Engineering; Keith Kavanagh, Engineering Management; Ronan Scally, Electronic Engineering; Cathy Swanton, Biomedical Engineering; and Cillian Briody, Architecture.

Education & Student Experience

In October 2015 the University embarked on a Curriculum Review and Enhancement Process led by Associate Professor Amanda Gibney, Vice-Principal for Teaching and Learning. This process is aligned to the UCD Strategy 2015 - 2020, strategic initiative 2: Defining Educational Excellence, and to date colleagues from across the University have defined their programmes' vision, values, and outcomes, and have engaged in the curriculum mapping process. Programme action and implementation plans are now in development, to deliver enhanced curricula aligned with our strategic objectives.

Engineering and Architecture students achieved notable success in competitions over the past year, such as the ESB Engineering Challenge which was won by Aaron Collier and Michael Purcell, UCD School of Mechanical and Materials Engineering together with Robert Fenlon and Daniel Cullen, UCD School of Electrical and Electronic Engineering.

Kevin Doherty, a PhD student in the UCD School of Mechanical and Materials Engineering was awarded first prize at the 11th Young Persons' World Lecture Competition, held annually by the Institute of Materials, Minerals and Mining and Liam Farrelly, a final year architecture student won the 2015 Architecture Wood Award, organised by the Wood Marketing Federation (WMF).



Engagement and Partnership

UCD Engineering Graduates Association events commenced with the award of sponsored EGA Gold Medals to students excelling in their disciplines. In late 2015, UCD EGA hosted its annual Autumn Panel Discussion event 'What will the Digital Future mean for Ireland?' followed by a lively debate. In April the EGA hosted a round table discussion on gender balance with Engineers Ireland and more recently the 2016 Spring Lecture on 'Tackling Ireland's Flooding Challenge'. The 2016 EGA Distinguished Graduate Award was presented to EPA Director General Laura Burke and Dr Tom Hardiman was awarded the inaugural President's Award at the EGA Annual Dinner in June in recognition of his extraordinary career spanning over 50 years.

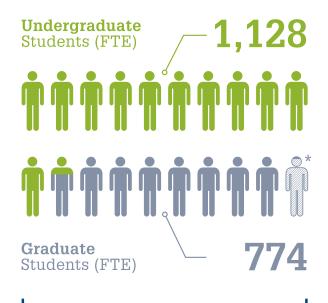
Internationalisation activity within the College continues to grow for both Architecture and Engineering and Memoranda of Association were signed in the past year with Chongqing University, Beihang University, and Ecole Nationale Supérieure de l'Electronique et de ses Applications. In addition, in July 2016 the first UCD degrees at the Beijing-Dublin International College were awarded and 18 BE Internet of Things Engineering students were conferred.

Professor David FitzPatrick Principal

Professor David FitzPatrick, Principal, UCD College of Engineering & Architecture with Dr David Burke, winner of the 2015 Alumni Award for Engineering.



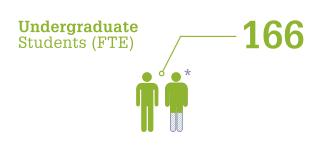
UCD Students in Ireland



Total Students

1,902

Overseas Operations





Research Awards



UCD College of Health and Agricultural Sciences







Professor Cecily Kelleher College Principal

Associate Dean for Research, Innovation and Impact Professor Helen Roche (PHPSS)

Associate Dean for Teaching and Learning Professor Jason Last (SM)

> Associate Dean for Global Engagement Associate Professor Pat Felle (SM)

The UCD College of Health and Agricultural Sciences was established in 2015 and brings UCD's health professionals under one banner providing an exciting opportunity to exploit synergies which exist across the One Health spectrum. The One Health initiative links the health of all living things, together with the existing synergies between human and animal health, public health and food science. The College supports the indigenous agri-food sector, animal health and medical professions through education and cutting-edge research. The College comprises five schools, the School of Agriculture and Food Science, the School of Nursing, Midwifery and Health Systems, the School of Medicine, the School of Public Health, Physiotherapy and Sports Science and the School of Veterinary Medicine.

Research, Innovation and Impact

Key areas of research strength in the College include Personalised and Translational Medicine, One Health, Food and Health, Health Systems and Health Services Research, Agriculture and Food Production, Early Childhood and Reproductive Health and Public Health and Health Promotion. These overarching themes encompass our broad research expertise.

There has also been great success for teams and individuals within the College, including five highly competitive SFI Investigator Awards won by Professor Catherine Godson, Professor Stephen Gordon, Professor David McHugh, Professor Carel Le-Roux and Professor William Watson. Additional SFI awards were won by Dr Eoin Cummins for Career Development, Professor Martin Steinhoff for Strategic Partnership. HRB awards were won by Professor Eilish McAuliffe for Research Leader and Professor Gerard Fealy for an HRB and Atlantic Philanthropies-funded project grant. Two Marie Skłodowska-Curie Innovative Training Networks were won by Professor Catherine

Godson and Professor Patrick Lonergan. Professor Shea Fanning won a significant Enterprise Ireland Innovation Partnership relating to food safety.

A number of faculty received prestigious international awards including Professor Des Higgins for his Kimura Motoo Award for significant contribution to the advancement of evolutionary biology and Professor Cormac Taylor for his Takeda Distinguished Research Award from the American Physiological Society.

There have been major multi-investigator awards including a Wellcome Trust/SFI/HRB joint award which will support a minimum of six outstanding medical graduates per year to undertake structured, integrated clinical scientist training, incorporating PhD and specialist clinical training. This prestigious programme will build a cohort of research-active clinician scientists and is being led in UCD by Dr Patrick Mallon, School of Medicine.



Education and Student Experience

In May 2016 the Education and Training group held the first College wide education forum on the theme of technology enhanced learning and assessment. The keynote speaker was Professor Katharine Boursicot, an internationally recognised authority in health education, who presented *Designing an Assessment Strategy*. Speakers from each constituent School then presented on innovative and effective assessment practices ranging from online proctoring through to practice based assessment.

The School of Veterinary Medicine developed an innovative proposal for a new kind of assessment strategy which defines a programmatic approach to assessment and maps very closely to programme outcomes in the three domains of knowledge, skills and attributes. The strategy was developed in consultation with a medical assessment consultant, Professor Katherine Boursicot. It aligns assessment tools to the domain of competence being tested; aligns assessment items to stage outcomes and identifies how assessments for each stage are aligned with programme outcomes. It only uses appropriate assessment tools, which demonstrate validity evidence.

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

UCD School of Agriculture and Food Science

Head of School Professor Alex Evans

UCD School of Veterinary Medicine

Head of School Professor Grace Mulcahy

UCD School of Medicine Head of School Professor Patrick Murray

UCD School of Nursing, Midwifery and Health Systems

Head of School Professor Martin McNamara

UCD School of Public Health, Physiotherapy and Sports Science Head of School Professor Giuseppe De Vito

As of September 2015





Engagement and Partnership

In November 2015, the School of Medicine, in collaboration with Harvard Medical School and the UCD Nursing Summer School 2016, organised the *Introduction to the Practice of American Medicine event*. This has become an annual event and will run again in November 2016. Further developments took place in the School of Public Health, Physiotherapy and Sports Science as their flagship Masters Degree in Public Health, has also been established in Penang Medical College.

2016 was the 60th anniversary of the establishment of UCD School of Physiotherapy, now integrated into the School of Public Health, Physiotherapy and Sports Science. This was celebrated with the launch of the new Physiotherapy Clinical Academic Group. This initiative formalises and consolidates a combined clinical and academic partnership between

the clinical physiotherapy departments of the Mater Misericordiae University Hospital, St Vincent's University Hospital and the Academic Physiotherapy Discipline at UCD. The vision is to drive forward excellence across four key pillars; Quality, Safety and Clinical Effectiveness in patient care; Education; Research, Innovation and Impact; and Professional Development.

The UCD School of Nursing, Midwifery and Health Systems continues its progress with the Lean Six Sigma programme, in conjunction with the Mater Lean Academy. Over 1100 interdisciplinary healthcare staff are now trained in the *Fundamentals of Lean Six Sigma for Healthcare*, leading on projects which have had myriad benefits for patients, staff and families.





College developments

UCD Lyons Research Farm received a big boost with the launch of a multi-million world-class dairy research and education facility. The project is spearheaded by UCD as well as leaders in the agri-food industry such as Dairymaster, Devenish Nutrition, FBD, Glanbia, Munster Cattle Breeding Group, Progressive Genetics and the Irish Holstein Friesian Association. The Dairy Research and Education facility at UCD Lyons Research Farm will be of enormous value to students, researchers and industry to help secure Ireland's international reputation as a country dedicated to excellence in the agri-food sector.

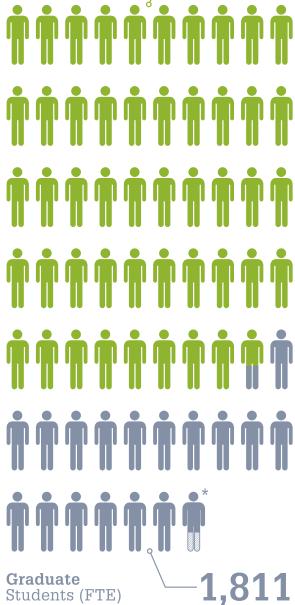
Professor Cecily Kelleher, Principal

Research Awards

€34,555,000



the Great Agri-Food Debate, sponsored by Dawn Meats and McDonalds Ireland in the UCD Garret FitzGerald Debating Chamber in the first annual Great Agri-Food Debate to consider the motion 'Ruminant

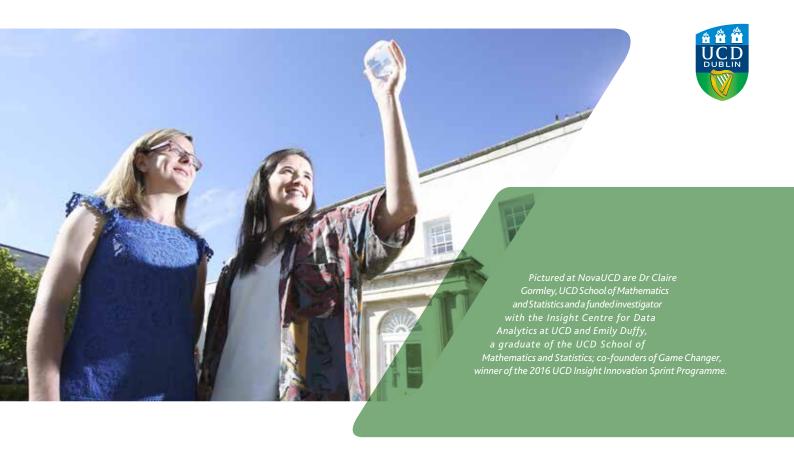


Total Students

6,670



UCD College of Science





Professor Joe Carthy College Principal/Dean

Director of Graduate School Associate Professor Emma Sokell

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Vice-Principal for Teaching and Learning Associate Professor Carmel Hensey

Vice-Principal for Research and Innovation Professor Fiona Doohan

Vice-Principal International Professor Jeremy Simpson

I am very pleased to report that UCD College of Science enjoyed a busy and successful year with many developments and achievements across our activities in 2015/16.

Teaching and Learning

UCD's flagship course, DN200 Science, is now the most competitive science common entry course in the country with a minimum entry of 510 CAO points in 2016. With the addition of a new major in financial mathematics, the course now offers 27 degree subjects, making it the most diverse science course in Europe. Our programme accepts almost 20% of students from non-traditional entry routes reflecting UCD's strategy to widen participation.

Professor Jeremy Simpson, Vice-Principal (International) for the College reports that our strategy for international recruitment has resulted in a significant increase in non-EU students in our undergraduate and graduate courses across science and computer science.

Career development is essential to prepare students for life beyond university. We now have both a dedicated Career and Skills Consultant, Edel Caraway and a dedicated Internships Manager, Carla Naltchayan on board. Consequently, more of our undergraduate and postgraduate students are availing of more relevant internship opportunities. UCD Career Development Centre consultant, Dr Aisling Harkin successfully launched a

new academic module *Preparing for your Future Career*, specifically aimed at undergraduate students. In addition, the UCD Career Development Centre organised numerous seminars, workshops and employer visits, as well as integrating specialised career preparation into several of our Masters programmes.

Associate Professor Maria Meehan, School of Mathematics and Statistics received a University Teaching Expert Award for her leadership role in mathematics education.

Associate Professor Carmel Hensey, School of Biomolecular and Biomedical Science, together with Associate Professor Patricia Kieran, School of Chemical and Bioprocess Engineering, won funding for a project supporting the design and development of digital learning tools for engineering and science students.

Research and Impact

One of the highlights of the year, the Annual O'Brien Science Lecture 2015 entitled *Personalised Cancer Genomics: Precision Medicine Meets Prevention* was delivered by Dr Kenneth Offit, Chief, Clinical Genetics Service at Memorial Sloan Kettering Cancer Centre.



This has been a hugely successful year in terms of campus company developments and innovation with highlights such as:

Logentries co-founded by Dr Trevor Parsons and Dr Viliam Holub was sold to Rapid7 for approximately \$68 million. Logentries which leads in cloud-based log management and search, is a spin-out from University College Dublin's Performance Engineering Laboratory in the UCD School of Computer Science.

OncoMark, a campus company co-founded by Professor William Gallagher was awarded €2.7 million Horizon 2020 funding. OncoMark is developing new diagnostics for breast cancer patients.

Heystaks Technologies, co-founded by Professor Barry Smyth, Dr Maurice Coyle and Dr Peter Briggs (UCD School of Computer Science) raised €1.5 million to help bring its mobile Intent Analytics platform to the market.

SiriusXT, co-founded by Dr Ken Fahy, Dr Fergal O'Reilly and Dr Paul Sheridan, as a spin-out from the UCD School of Physics, secured €3 million in the latest round of Horizon 2020 SME Phase 2 funding. SiriusXT has spent ten years developing the technology for its soft X-ray microscope called SXT.

UCD President, Professor Andrew J Deeks, Professor Kevin O'Connor with his NovaUCD 2016 Innovation Award and Professor Orla Feely, Vice-President UCD Research, Innovation and Impact. *Phision* Therapeutics, founded by Associate Professor Breandán Kennedy, UCD School of Biomolecular and Biomedical Science won UCD's 2015 Start-Up Award. The company is developing proprietary therapeutic drugs to more effectively treat vision loss in an attempt to prevent blindness associated with ageing or diabetes.

Professor John Murphy and Professor Liam Murphy from the Performance Engineering Laboratory at UCD School of Computer Science won a US-Ireland Research Innovation Award for their application on the impact of UCD's decade-long research collaboration with IBM Dublin Software Lab which resulted in the invention of the 'Real Time Correlation Engine'.

Research Funding Highlights

Professor Fiona Doohan: €1,071,308 from the Horizon 2020, and €540,174 from the SFI/BBSRC (Biotechnology and Biological Sciences Research Council, UK) for her research in crop science.

Professor Jennifer McElwain: €1,302,255 from SFI for plant and climate change research.

Associate Dean of Science Associate Professor Tasman Crowe

Associate Dean for International Study (North America) Dr Tadhg Ó Cróinín

Associate Dean for Widening Participation Associate Professor John O'Connor

UCD College of Science consists of seven schools:

UCD School of Biology and Environmental Science

Head of School Professor Jeremy Simpson

UCD School of Biomolecular and Biomedical Science Head of School

Associate Professor Keith Murphy

UCD School of Chemistry

Head of School Professor Gareth Redmond

UCD School of Computer Science

Head of School
Professor Pádraig
Cunningham

UCD School of Earth Sciences

Head of School
Professor Frank
McDermott

UCD School of Mathematics and Statistics

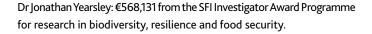
Head of School Professor Gary McGuire

UCD School of Physics Head of School Professor Padraig Dunne

As of September 2015

Associate Professor Maria Meehan, UCD School of Mathematics and Statistics receiving a University Teaching Expert Award for her leadership role in mathematics education from Professor Mark Rogers, Registrar and Deputy President.





Professor William Gallagher: €1,681,731 from SFI Investigator for cancer research.

Professor Brian Vohnsen: €498,579 from Horizon 2020 for research in eye disease .

Associate Professor Vladimir Lobaskin, UCD School of Physics, will lead an €8 million Horizon 2020 nanotechnology health risk study, to develop methods of assessing the health and safety risks associated with engineered nanomaterials.

E-CAM, co-ordinated by UCD and chaired by Professor Luke Drury, UCD School of Physics and the Dublin Institute for Advanced Studies, was awarded €4.8 million through Horizon 2020, to develop software components for the simulation of materials.

A scientific team lead by Dr Jens Carlsson, UCD School of Biology and Environmental Science played a key role in identifying the exhumed remains of Thomas Kent, one of the 16 men executed in 1916 following the Easter Rising. Using scientific DNA analysis, the work involved collaboration with the State Pathologist's Office, the National Forensic Co-ordination Office at the Garda Technical Bureau and Forensic Science Ireland.

IBM and UCD have set up a programme that will enable their scientists to collaborate on researching and developing new technologies for the next generation of smart and sustainable cities. This programme, based at UCD O'Brien Centre for Science, will focus on applying cognitive computing technologies to enhance human decision-making.

Associate Professor Susan Quinn has been recognised by the Royal Society of Chemistry for her work as part of an international research team investigating the relationship between the molecular origins of disease and the absorption of light energy by DNA. This is the first time a UCD chemist has received an award from the Royal Society of Chemistry in recognition of their research and the work has been published in *Nature*.

UCD President, Professor Andrew J Deeks presented the NovaUCD 2016 Innovation Award to Professor Kevin O'Connor, UCD School of Biomolecular and Biomedical Science. Professor O'Connor's interests include research into the development of biodegradable polymers and methods of improving the recycling of plastic and other materials.

An educational garden project, created by Associate Professor Caroline Elliott-Kingston, UCD School of Agriculture and Food Science and Professor Paul McCabe, School of Biology and Environmental Science, won a Gold Medal at the Bloom Festival. The winning 'UCD Evolution of Land Plants Garden' project represents the evolution of plants over the 500 million years since they first appeared on earth. The garden demonstrated land colonisation by plants that began about half a billion years ago, beginning with algae that moved out of freshwater, followed later by mosses and ferns, and finally flowering plants.

Professor Emma Teeling and Professor Frederic Dias were elected as members of the Royal Irish Academy, considered the highest academic honour in Ireland. Also this year, Professor Patrick Guiry was elected as Science Secretary of the RIA.

Dr Caroline Elliott-Kingston, UCD School of Agriculture and Food Science, and Professor Paul McCabe, UCD School of Biology and Environmental Science, who created the 'UCD Evolution of Land Plants Garden' that won the Gold Medal for Best in Concept category at the Bloom Festival at the Phoenix Park, Dublin.



UCD STEM Club

Inaugurated in 2016, the UCD STEM Club is a joint initiative between the College of Science and the College of Engineering and Architecture which aims to hold small, themed meetings in an informal and social setting for multidisciplinary groups of academic and research staff working in STEM areas, to come together to hear about each other's research work and interests. Two meetings have been held to date on the themes of Flow Chemistry and Microfluidics and Chemical Engineering and Physics across the Scales.

The O'Brien Centre for Science has become a hugely successful location for national and international workshops and conferences, hosting over 20 such events in 2015/16 such as the European University Association (EUA) Conference, Librarians Information Literacy Annual Conference (LILAC), and the European Educational Research Association (EERA/ ECER) Conference, the largest ever held at UCD.

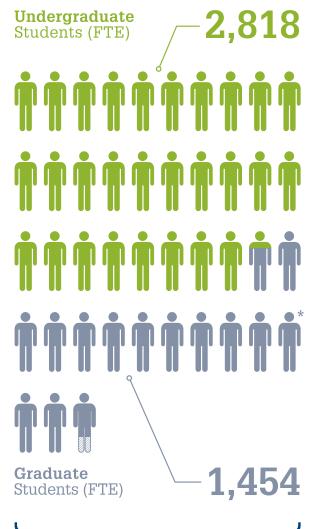
Irish Academy, were elected as members of the RIA, considered the highest academic honour in Ireland.



Professor Joe Carthy Principal



UCD Students in Ireland



Total Students

4,272

Overseas Operations

Undergraduate / Total Students (FTE) = 100 People Approx



UCD College of Social Sciences and Law





Professor Colin Scott College Principal

Vice-Principal for Research, Innovation and Impact Professor Tony Fahey (to December 2015) Professor Alun Jones (from January 2016)

Vice-Principal for Teaching and Learning Associate Professor Eilis Hennessy

> Vice-Principal for Graduate Studies Associate Professor Enda Murphy

Vice-Principal for Internationalisation Dr Johan Elkink UCD College of Social Sciences and Law is the largest centre in Ireland for education, research and engagement in the social sciences and related disciplines. The College was established on 1 September 2015 as part of a wider university restructuring and comprises eleven schools, the Graduate School of Social Sciences and Law and the College Office. UCD is ranked among the top two hundred in the world in most of the College's disciplines and in the top 100 for archaeology, development studies, law, politics and international relations and social policy according to the QS World Rankings 2016.

As College Principal, my role is to support the schools to develop and implement their plans, with the support of my colleagues from the College Office and Graduate School. During the year we developed new structures to ensure smooth implementation, engaging with schools on addressing potential impediments, whether at school, college or university level. An equally important role for the College Principal is to contribute to the overall development of the University in matters such as strategy, finance and human resources.

During the course of the year I took on the role of chairing the University Management Team Equality, Diversity and Inclusion Group and was pleased to be able to sponsor an International Women's Day Event in the College as part of a wider network of events at UCD. Such events are a small but visible component of a wider set of structural and cultural changes which the University is making to further promote gender equality and to deliver on its commitment to enhance equality, diversity and inclusion on the campus more generally.

I was delighted that our schools were able to recruit twenty new faculty, with most taking up their roles between June and September in time for the start of the next academic year. The block advertisement for these posts, placed in the international higher education press, served the purpose of both announcing the establishment of the College and that it was engaging in significant academic recruitment. Demand for posts was very high, enabling us to recruit excellent candidates. Funding for these posts came from retirements and resignations, additions to school income from increases in fee income and sponsorship of posts. Professor James Devenney joined the Sutherland School of Law as McCann FitzGerald Professor of International Law and Business in June 2016 and Professor Liam Delaney will join the School of Economics as the first AIB Professor in Behavioural Economics in January 2017. Professor Delaney's appointment and the support of AIB are linked to plans to establish a behavioural economics laboratory, jointly with the UCD Geary Institute for Public Policy, and also a new Masters programme in behavioural economics.

Central to the capacity of the College to build a cosmopolitan environment has been our strategy to bring in faculty and students from all over the world. A key part of our success in this respect can be attributed to the work of Dr Jos Elkink, UCD School of Politics and International Relations, who completed an outstanding term as Vice-Principal for Internationalisation at the end of the academic year.

New Programmes

It is important to keep our wide ranging educational programmes under review, to adapt them to changing circumstances and take advantage of opportunities to put on new educational offerings. New programmes offered for the first time in 2015/16 include Masters degrees in Geographies of the Global South and Digital Curation. The College is participating in a wider university process to review the curriculum across all programmes and, as part of this process is reviewing the structure of undergraduate education in the social sciences. This is being led by Associate Professor Sara O'Sullivan, Dean of Social Science.

Research and Innovation

The College has strengths across the main fields of research in the social sciences and law. The inclusion of the School of Archaeology has brought in two major

research groups, one focused around the Centre for Experimental Archaeology and Ancient Technologies led by Professor Aidan O'Sullivan and the second exploring Ancient DNA, led by Professor Ron Pinhasi. Professor Pinhasi's pathbreaking work in human evolution, variation, demographic history and microevolution has led to a number of publications in *Nature*, and has had very wide impact in the popular media.

The formal inclusion of the Sutherland School of Law brings into the College a major European Research Council funded project on the Architecture of Environmental Regulation, led by Professor Suzanne Kingston.

The College supports researchers to identify and secure funding and has been successful with both small and large projects, with conspicuous success in securing both doctoral and postdoctoral research grants through competition from the Irish Research Council. Professor Tony Fahey, UCD School of Social Work, Social Policy and Social Justice, in his role as Vice-Principal for Research, Innovation and Impact, has been a key champion of College research competitions and of the development of grant application review services, which have supported researchers very effectively. Tony stepped down as Vice-Principal to take up a period of research leave, and I am grateful to him and also to his successor, Professor Alun Jones, UCD School of Geography.

Dean of Social Science Associate Professor Sara O'Sullivan

Dean of Arts Associate Professor Marie Clarke

UCD College of Social Sciences and Law consists of eleven schools:

UCD School of Archaeology Head of School

UCD School of Economics Head of School Professor Karl Whelan

Professor Gabriel Cooney

UCD School of Education *Head of School*Professor Dympna 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/Dean Professor Joe McMahon

UCD School of Philosophy Head of School Professor James O'Shea

UCD School of Politics and International Relations Head of School Professor Ben Tonra

UCD School of Psychology Head of School Associate Professor Suzanne Guerin

UCD School of Social Justice Social Work and Social Policy Head of School Associate Professor Michelle Norris

UCD School of Sociology Head of School Associate Professor Diane Payne

As of September 2015





Engagement and Outreach

A key objective of the College strategy is to raise the profile of the social sciences and to enhance literacy and understanding across the various fields beyond the University, for example with government, policymakers, businesses and NGOs.

A very successful example is the Preparing for Life evaluation led by Dr. Orla Doyle of the UCD School of Economics. This is the longest running random control trial study of an early intervention programme in Ireland. Since 2008, it has followed the journey of 200 families taking part in its home visiting programme to determine its impact on parenting, child development and school readiness. Preparing for Life, Northside Partnership and the UCD Geary Institute for Public Policy hosted an academic seminar in August to share the complete results from the study bringing together 8 years of data from mothers, fathers, teachers and children.

UCD School of Education also hosted this year's annual European Congress for Educational Research (ECER 2016), the annual conference of the European Educational Research Association (EERA), an umbrella organisation for a multiplicity of national educational research associations

throughout Europe. There were over 2,500 delegates from more than 70 countries who presented in excess of 2,000 papers during the conference. The week began with a pre-conference where 380 PhD students from 50 European countries presented their work in progress, while mentoring was provided by academic staff from the UCD School of Education. This was the largest conference hosted in Belfield to date. Feedback from EERA indicates that it was "one of the best conferences ever" in its more than 20-year history on almost as many university campuses across Europe.

The College was officially launched at the FitzGerald Autumn School and Lecture, at which 24 papers were presented in panels on the significance of the social sciences. I was very grateful to panel chairs who came from the worlds of journalism, public policy and the NGO sector. The day was capped with some significant words from Professor Orla Feely, Vice-President for Research, Innovation and Impact on the importance of research in the social sciences for Ireland and the wider world and a public lecture by Professor Cass Sunstein, Harvard Law School, and a former White House official in the field of regulatory policy.

The College reached out to an even wider community on the day of the UCD Festival, at which our highlights included the Philosophy Café,





Viking Dublin House, by Professor Aidan O'Sullivan and Dr Eileen Reilly and built by PhD scholars Stephen Fox and Brendan O'Neill at the UCD Centre for Experimental Archaeology and Material Culture.

sessions on education and psychology, a debate on Brexit, an exhibition of rare maps, a display of artefacts and costumes associated with the 1916 Rising, a sociology poster board exhibition and exciting tours of the UCD Centre for Experimental Archaeology.

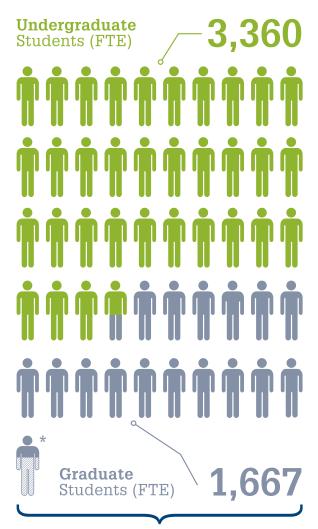
The College sponsors an Artist in Residence programme and, following the successful engagement of Michael McLoughlin in 2015 as first College artist in residence, we are pleased this year to be joined by Marie Brett. Marie is a visual artist working in photography, sound, film and sculptural form. Her work recurrently questions culturally shunned and difficult topics, often exploring ideas of loss, crisis and human suffering in non-stable contexts.

Professor Colin Scott Principal

UNIVERSITY COLLEGE DUBLIN LEADING EDUCATI CONTRIBUTIONS

RESEAR

UCD Students in Ireland



Total Students

5,027

Overseas Operations

Undergraduate / Total Students (FTE)





Research Awards



€5,201,000

(ECER 2016) - over 2500 thousand delegates attended the conference, one of the largest ever held in UCD.

Finance and Capital Development





Gerry O'Brien Bursar

For the 2015/16 year, the University generated a surplus of €0.58 million on its HEA core-funded activities. This result represents a strong financial performance, given that it was achieved in a year which saw no improvement in State funding and a continuation of difficult economic circumstances at a national level.

State Funding of Higher Education

The biggest single financial challenge facing the University in the current economic environment continues to be the sustainability of operations. Between 2008 and 2015, the sector suffered successive reductions in State funding despite increased demand for higher education. However, UCD has managed to make progress towards meeting its strategic objectives and to remain within budget during that period, albeit to the detriment of student:staff ratios, student support services and campus infrastructure.

In 2016, for the first time since the economic crisis, UCD's core recurrent grant funding was not reduced, staying at 2015 levels. However, concerns about long-term financial sustainability remain and the need for ongoing infrastructural investment must be addressed urgently.

The Report of the Expert Group on Future Funding for Higher Education was published in July 2016. Its central recommendation is that Ireland needs to substantially increase the level of investment in higher education to ensure that the system can deliver fully on its role in supporting national economic and social development. The report identifies three potential funding options: a predominantly state-funded system; increased state

funding with continuing student fees; or increased state funding with deferred fee payment through incomecontingent loans.

The Expert Group estimated that the higher education sector needs additional annual funding of €600 million by 2021 and €1 billion by 2030 to deliver higher quality outcomes and provide for increased student demographics. This would enable an improvement in student:staff ratios, better engagement with students, and improved support services for faculty 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.

The universities have called on the Government and opposition parties to implement the Report of the Expert Group, and emphasised that the political system must make the difficult choices needed to improve funding for universities and the manner in which this funding is distributed.

Further Development of HEA Funding Models

The HEA has indicated that the findings of the Expert Group will feed into a review of the higher education funding model which will commence during 2016. The input of higher education institutions will be critical to the success of this process.

The HEA remains committed to its intention to review and revise its existing RGAM (Recurrent Grant Allocation Model) funding mechanism to align with the recommendations of the National Strategy for Higher Education to 2030 and to ensure that its funding allocation processes support national strategic objectives for higher education.

The UCD Performance Based Funding Model

2015/16 marked the second year of a performance-based budgetary model, whereby additional resources are allocated on a formulaic basis between the school and college generating the additional income, and the University. This year the model was extended to include EU undergraduate fee income, reflecting the importance of this core activity and ensuring it is resourced equally alongside graduate and non-EU activity. The distribution of additional income to schools has been welcomed, and enables schools to exert more control over their finances, which has helped to compensate academic units for the non-restoration of adequate state funding.

Fee rates for non-EU students have been increased significantly and now position UCD in the international marketplace more appropriately in terms of comparator institutions. In parallel with these fee increases, the awarding of fee scholarships is being used as a tool both to mitigate financial hardship for students and also as a strategy to promote the University's academic programmes. This has helped drive an increase in the net (after scholarships) non-EU fee income. The level of scholarships

is fully taken account of in the performance-based budgetary model, with allocations of additional resources being made on the basis of net rather than gross fee income.

Other budgetary measures planned for next year include a mechanism to implement a Social Costs Scheme, to spread the social costs of employment (maternity leave replacement, long-term sick leave and redundancy) over time and across units so that costs are shared more equitably and so that irregular or once-off costs do not present undue difficulty to individual schools or support units in staff planning or in carrying out their activities. This initiative will also support other gender equity initiatives. The Scheme has been incorporated into staff plans developed for the 2016/17 budget.

During the year schools and support units prepared their budgets and updated their five-year plans alongside their strategic plans. The continued uncertainty over both the level and the nature of state funding continues to be a significant problem for units in preparing their financial plans.

New Systems Development

The introduction of new systems during the year continued to improve financial reporting and budget forecasting.

Further enhancements were made to the staff planning module with greater upload functionality. This year also saw the development of fee income and fee related expenditure reporting by school and by college, which is a critical component part of the five-year forecasting facility. There is also greater emphasis in the management accounts on the reporting of committed and discretionary reserves at school and support unit level and an extensive suite of management reports have been introduced to enable decision making at school level.





New technology was also introduced to improve the management of our equipment register and a project is currently underway to migrate records of equipment held on an excel based system to an online database system, which will allow the technical aspects of equipment to be recorded, as well as images and documentation such as purchase invoices. The new online database will be more secure and will see a move to the use of barcoded asset tags and barcoded readers.

Procurement

The Procurement Office, which runs supplier tenders on behalf of the University, continues to provide support and training to staff across the University. During the year a range of training programmes were offered to staff with the aim of enhancing the co-ordination of buyer activity across the University and of improving the level of procurement compliance generally.

UCD is also actively working with the Office of Government Procurement (OGP) to ensure that procurement activities in UCD are aligned with the objectives of the OGP, which has a clear remit from the State to deliver sustainable savings for the taxpayer, through centralising procurement across the public sector.

Increase in Non-State Funding

UCD continued its investment in international student recruitment through the work of the Global Engagement Group and further student recruitment centres were established in overseas locations for the purpose of recruiting non-EU students.

Income from commercial activities continued to make a valuable contribution to the University's finances, which included licence fee income from catering operations on campus and income from the sale of shares in campus companies.

Income from other ancillary activities continued to increase and 2015/16 again saw significant earnings generated in summer residential business on the campus. In collaboration with the UCD International Office, summer activities experienced growth across the global education sectors, particularly through the expansion of partnerships with major universities in the USA, most notably the University of California. In addition, the hosting of high profile events such as the GAA World Games provided an excellent platform to showcase UCD's world class academic, residential and sporting facilities.

Campus Development

As part of Ireland's largest and most globally engaged University, the UCD estate incorporates circa 389,000 sq.m of building floor area with an insurance replacement value of circa €1.17 billion.

Continued investment in campus facilities will ensure that students and faculty have optimal access to new approaches to education, research and innovation, while advocating a sustainable healthy and living campus environment.

The new UCD Strategic Campus Development Plan 2016-2021-2026 was formally launched by the President during a recent visit by Ministers Richard Bruton TD, Simon Coveney TD and Damien English TD. The purpose of this plan is to communicate the broad direction of future physical developments of the Belfield campus in terms of the facilities required to support the vision of being a global top 100 university.

The UCD Strategic Campus Development Plan 2016-2021-2026 supports key University objectives in terms of the student experience; strengthening the disciplines; strong interdisciplinary research, innovation and education; and attracting an excellent and diverse campus community.

The Plan also recognises that future campus development will be a blend of both new construction to support future growth and the extensive refurbishment of older buildings which have now reached a stage in their lifecycle when significant investment is required.



Recent and Planned Capital Developments

Reimagining the campus to provide enhanced support for UCD and our wider community, capital development is focused on academic facilities, increased on-campus residences, greater social and cultural engagement, and the promotion of knowledge-based, industry-linked research and innovation facilities. To provide the best education, UCD has advanced campus developments in areas which reflect both our strengths and the needs of the global economy and society.

Architects were appointed to develop the new 2,500 sq.m UCD College of Business Future of Learning Project which will feature immersive and multi-site technologies in teaching spaces designed to emulate a real-life working environment.

Construction of the new 2,200 sq.m UCD Confucius Institute for Ireland commenced on site in April 2016 and upon completion the building will act as a flagship for Chinese language and cultural engagement. This initiative will accommodate programmes ranging from primary school to third level students, while also providing expert support to Irish businesses who wish to trade in China, encouraging Chinese investment in Ireland and enhancing UCD's global reach.

The phased refurbishment of 1970s buildings to extend their useful life is a key component of UCD's Estates Strategy. Extensive fenestration and refurbishment works in Block C and D of the UCD Newman Building at Belfield enabled the co-location of the UCD School of Information and Communications Studies with related disciplines this summer. This is in line with the University objective to consolidate and strengthen academic disciplines. The new design acts as a pathfinder for the redevelopment of the upper floors of the wider building, delivering attractive and engaging spaces, while bringing more natural light into teaching, meeting and communal areas.

An initial phase of development has been completed at the UCD Lyons Research Farm to support enhanced teaching and research field activities for agriculture, food science and veterinary medicine disciplines.

The University has six engineering and architecture schools, which are dispersed across eleven campus buildings ranging from 25 to 100 years old. A working group has been established to articulate a new vision for establishing the UCD Engineering and Architecture Precinct at the heart of the academic campus.

A design team has been appointed to develop the Merville House East Courtyard for planned NovaUCD activity expansion. The development will provide additional accommodation in which entrepreneurship and innovation can flourish and the overall centre will continue to act as a focus for University-Industry co-operation and commercialisation of research on the campus.

In addition to delivering enhanced campus facilities for UCD Access and Lifelong Learning, UCD Agile and UCD Foundation programmes, other accommodation development initiatives include the establishment of the IBM co-laboratory as an industry partnership in the UCD O'Brien Centre for Science.

The successful launch of the new 354 bedroom Ashfield Residences in August 2016 increases campus accommodation to 3,170 bedrooms and forms part of an ambitious Student Residence Masterplan designed to increase UCD capacity to circa 6,000 bedrooms. A series of residential courtyards, amenity spaces and leisure areas will combine to create a vibrant residential environment. The objective is to bring together students from different cultures and socio-economic backgrounds, while delivering an enhanced student experience and the relevant student supports. Planning documentation has been prepared to facilitate the delivery of high quality residential accommodation to meet the needs of a growing student population. This initiative is aligned with the recently announced Government Action Plan for Housing and Homelessness.

A project brief was prepared for the new UCD University Club as a unique social engagement setting for faculty and staff across the University, while providing an attractive and welcoming focal point for UCD alumni and



corporate members at a high profile location on campus. A design team has been appointed to develop high quality café, restaurant and meeting facilities, which would be complemented by excellent conference and event facilities in the adjacent O'Reilly Hall. The UCD University Club will act as a hub designed to support the development of relationships with alumni, partner universities, agencies and companies, nationally and internationally.

The provision of attractive and welcoming UCD Sports and Recreation facilities promotes a balanced, healthy life for students, faculty, staff and the wider local community. Tasked with implementing a review of current facilities and preparing a strategy for future sports developments, a Sports Development Working Group was established in early 2016 under the leadership of Professor Patrick Guiry. The Working Group will engage with relevant student and sports bodies over the coming months and will include consideration of a wide range of sports infrastructure.

Community Engagement

UCD has an extraordinary literary heritage, from James Joyce to Flann O'Brien, from Mary Lavin to Marina Carr, and from Austin Clarke to Colm Tóibín, producing a stream of wonderful writers whose work is admired throughout the world. Planning consents were granted in August 2016 for the development of the Ulysses Centre at Newman House, St Stephen's Green. In collaboration with the National Library of Ireland, this landmark destination for public and scholarly engagement will celebrate Ireland's renowned literary heritage, inspiring the next generation of creative writers. In addition to the UCD and NLI Collections, an exciting portfolio of original Joyce materials and ephemera has recently been made available by a donor to the Ulysses Centre.

The Belfield campus is a unique national resource, with the most diverse array of publically accessible educational, cultural, sports and recreation facilities. UCD is engaged in extensive outreach programmes and as a focal point for the wider local community, Belfield provides playing pitches, swimming pool, woodland walks, heritage houses, art sculptural trails, cultural exhibitions, theatre, seminars, cinema and other recreation facilities.

The priorities for UCD Strategic Campus Development Plan 2016-2021-2026 were identified through consultation with University senior management, faculty, staff and students in conjunction with local resident groups and local authorities. An exhibition outlining the major campus developments envisaged for Belfield was displayed at the UCD Festival, the Ashfield Residences launch, the UCD Student Centre and in the UCD O'Brien Centre for Science.

As part of other initiatives to raise the profile and visibility of the University, preparation of concept imagery has commenced to identify options for a physical architectural intervention at the Stillorgan campus entrance which might incorporate artwork, landscape and other public realm features designed to offer a unique, attractive and welcoming interface with the wider city.

The sylvan setting that defines the Belfield campus contributes both to the strong sense of place and identity, and the creation of a favourable image of UCD as a place of learning. Under an ongoing biodiversity and tree management programme, the University has commenced the identification of ecological resources on campus, including the various flora and fauna, landscapes and ecosystems. The UCD Green-Campus Committee has carried out a preliminary review of campus environment related opportunities to identify potential projects which would



collaboratively engage students and staff in Green Campus initiatives. Preparation was undertaken for the UCD planned participation in the inter-varsity Bio-blitz competition which will highlight and promote campus biodiversity, enhance available information and inform future decision-making in the context of Belfield green infrastructure development. A biodiversity trail will be developed to help inform students, staff and visitors of the natural resources located on campus.

UCD continues to actively work with the National Transport Authority and Dún Laoghaire-Rathdown County Council to promote a sustainable travel plan for the Belfield campus. The success of the UCD subsidised shuttle bus service from Belfield to Sydney Parade in 2014 led to the trial introduction of shuttle bus services between UCD and the Windy Arbour LUAS Green Line, and between UCD and Tallaght. NTA has recently granted a license to a private bus operator for the Clondalkin to UCD via Tallaght, Firhouse and Rathfarnham bus route. Additional facilities for 400 bicycles with improved design for secure parking were installed at strategic locations. The introduction of car parking demand management was successfully implemented by UCD in late 2015.

Energy

In August 2016, UCD was awarded ISO50001 certification and is the first Irish university to achieve full organisational certification for the management of both energy and water. This certification is a significant achievement, particularly considering the scale of the University, the existence of multiple sites, in addition to the condition and age profile of the UCD building portfolio.

UCD is committed to delivering the Public Sector 2020 Energy Targets of 33% improved efficiency, having achieved a 25.6% reduction to the end of 2015. Success to date has been achieved through a structured energy management system, the integration of energy efficient design features in new construction and major refurbishment works, as well as through enhanced user behavior, facilitated by energy awareness and engagement campaigns.

Capital development continues to be an important element of the overall UCD energy and sustainability strategy. As the first Irish university science building designed and constructed to the international BREEAM environmental standard 'Excellent', the UCD O'Brien Centre for Science East Building has now attained post-construction review certification. With an A-rated energy design, the Ashfield Residences have a low heating demand and electricity requirements which will be significantly met by the roof mounted solar photovoltaic panels.

A number of other refurbishment projects were delivered over the past year that have delivered energy savings, including the introduction of low energy LED lights, boiler, pump and fan upgrades, in addition to fenestration and fabric improvements. UCD continues to improve smart building controls, helping to deliver enhanced environment control, energy and water efficiency. Demonstrating UCD's continued commitment to sustainability, the University will continue to promote innovative design features in new build and renovation projects.

The 'Switch Off' campaign for bank holiday weekends has continued to be a success, and there are plans to launch a student and staff energy management campaign during the upcoming academic year to help build on these user-related savings.

Gerry O'Brien
Bursar

UCD Energy Use

	2012 / 13	2013 / 14	2014 / 15	2015 / 16
Total Area m²*	297,565	314,400	314,400	314,400
Electricity* kWh	27,296,800	26,304,456	24,495,179	26,064,323
Gas kWh	70,706,905	70,970,958	66,771,867	61,444,804
Total Energy kWh	98,003,705	97,275,414	91,267,046	87,509,127
kWh Use per m²	329	309	290	278

^{*}Area excludes residences accommodation.

kWh use per m²

Decrease in 2015/16 compared to 2014/15



Global Engagement





Dolores O'Riordan Vice-President for Global Engagement

It is now almost one year since I was appointed as UCD Vice-President for Global Engagement. It has been a busy, but productive year and the support of the Deputy Vice-President for Global Engagement Professor Mark Richardson, has indeed been valued.

Focus in the early part of the year was on the development of UCD's Global Strategy which is now complete. The strategy has five key objectives:

- Develop a distinctive global culture which will encompass all aspects of University life
- 2. Extend and develop strategic relationships to enhance our global engagement
- 3. Grow our global reputation for excellence in education, research, innovation and impact
- Increase the global impact of our scholarship, research, innovation
- Further develop an enabling environment for UCD's global activities

An implementation plan has been developed, so the real work is now underway, with progress being made in each of the strategic objectives.

The units comprising the Global Engagement portfolio (International Office, Applied Language Centre, Irish Institute for Chinese Studies and the UCD Confucius Institute in Ireland) have each had a very active year.

The staff of the International Office have been busy supporting the activities of schools and colleges. This work has resulted in an expansion of our international student numbers to 7038, with an additional 5591 students studying on UCD overseas programmes. Our network of Global Centres in the USA, China, India and South-East Asia have become further embedded in our activities and now provide very important support to our global endeavours. I have enjoyed meeting with the staff in these offices and hearing their views on potential opportunities in their respective regions.

Building international partnerships is a key objective for UCD and this year quite a number of collaborative programmes were established with partners including Harbin Institute of Technology, Chongqing University, Communication University of China, the Indian Red Cross and Irish Red Cross. In the USA, new study abroad partners include University of Hawaii and University of Minnesota.

Our global strategy seeks to increase the mobility of staff, faculty and students. This year saw the first mobilities take place under the new Erasmus+ International Credit Mobility (ICM) programme; two faculty members travelled to the University Hasan Prishtina in Kosovo.

I am delighted to report that student exchange numbers have increased, with 670 UCD students availing of Erasmus study exchanges/traineeships and non-EU exchanges.

Through Universitas 21 (U21), five UCD undergraduate students were awarded travel scholarships to participate in the U21 Summer School at Shanghai Jaio Tong University in China on the theme 'Traditional Chinese Medicine and its Culture' and three UCD students presented their research projects at the 12th U21 Undergraduate Research Conference in Mexico.

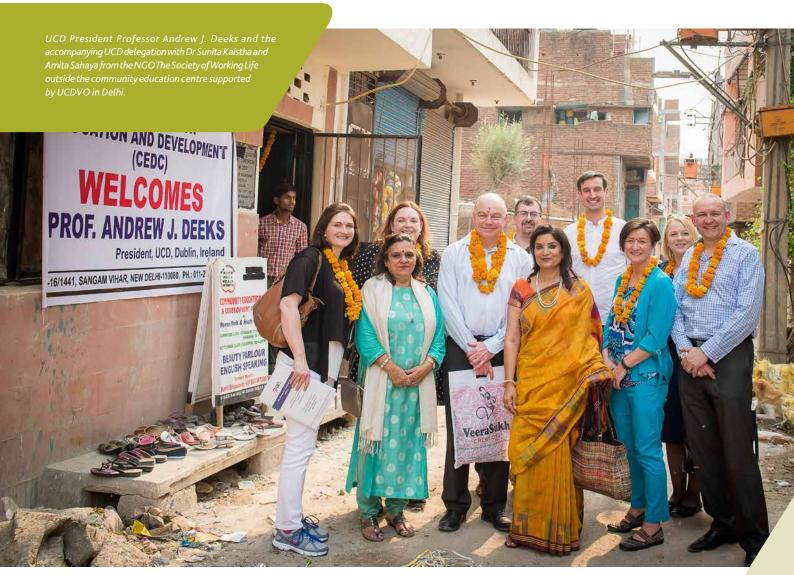
One of my first official UCD trips as VP for Global Engagement was to attend the GAA Asian games in Shanghai, where our UCD international Gaelic football team put on a magnificent performance in the women's intermediate event and were very narrowly beaten in the final. A team from the Beijing Dublin International College (BDIC) competed in these games and also in the World GAA games held in Dublin in August,

demonstrating how our national sporting activities are now translating well to our Beijing campus.

It was another busy year for UCD Volunteers Overseas (UCDVO) with 134 volunteers participating in activities in India, Nicaragua, Tanzania, Uganda and Haiti. In May, together with the President and other UCD colleagues, I had a wonderful opportunity to experience first-hand the work of the UCDVO in a women's support centre in Delhi.

As well as supporting students to study abroad, we have also endeavoured to enhance the international experience of students who do not travel. Throughout the year, significant international events were celebrated in UCD's Global Lounge. These celebrations are not only good social events but also help to enhance awareness and celebration of global cultures and activities.

The global engagement team was involved in a number of alumni events throughout the year. One of the most memorable events was hosted by the Irish Ambassador to India H.E. Brian McElduff, at his residence in Delhi, which coincided with the conferring of an honorary degree on Dr Mohini Giri.





A big welcome for international students arriving at Dublin Airport.

The Irish Institute for Chinese Studies continued its efforts to promote the development of Chinese language and culture. Students registered to degree programmes and modules related to Chinese studies have now reached 122 and 646 respectively.

The UCD Confucius Institute in Ireland had a very active year engaging in an array of outreach activities and cultural events including:





Confucius Institute Day; Spring Festival; Chinese Bridge Competitions; Confucius-Cup Go Tournament; Confucius-Cup Table Tennis Tournament and the Confucius-PhD Forum. A major highlight was the spring festival gala which attracted over 2000 people at the Convention Centre Dublin. The splendid gala was hosted by UCD in conjunction with the Embassy of the People's Republic of China in Ireland, as well as the local Chinese community. In February, Confucius Medals were awarded to Mr Xu Jianguo, the former Chinese Ambassador to Ireland, and Mr Frank Keane, the founder and Chairman of Motor Import Ltd, for their

Gaelic Football team from BDIC participating in the 2015 FEXCO Asian Gaelic Games tremendous contribution to relations between Ireland and China. The Asian Economic Panel (AEP) Conference was hosted by UCD and 30 scholars and economists from around the world gathered to exchange their views on Asian economic issues.

In March, I welcomed the appointment of Dr Rachael Fionda as Director of the UCD Applied Language Centre (ALC). The ALC has undergone a successful period of transition under the new Director. The key development over the past 12 months was the reconfiguration of support roles and review of the overall structure within the Centre. The new structure supports the ALC in achieving its goals under the Global Engagement Strategy 2016-2020 and beyond.

I would like to take this opportunity to thank all faculty and staff who have contributed to the many global engagement activities over the past year. I look forward to working with you all to realise the bold ambitions of UCD's global engagement strategy.

John of Riorda

Dolores O'Riordan, Vice-President

Health Affairs





Professor Desmond Fitzgerald Vice-President for Health Affairs The year has brought many changes to the Irish health system with the establishment of seven hospital groups countrywide, each with their respective academic partners. UCD is the academic partner of the largest group, the Ireland East Hospital Group (IEHG) and is also one of the affiliated academic partners of the National Paediatric Hospital that is currently under construction. The core strategy is to develop the group as an Academic Health Science Centre, with the aim of greatly improving patient care through education, training, research and innovation.



IEHG Cancer Clinical Academic Directorate (CaCAD)

On 29 June, 2016 the IEHG, together with UCD, launched the first IEHG Clinical Academic Directorate (CaCAD). The CaCAD is Ireland's largest oncology centre and will focus on personalised medicine for cancer.

On the same day as the launch of the CaCAD, the UCD/ IEHG Precision Medicine Facility, based in the UCD Conway Institute was opened, funded under the Programme for Research in Third-Level Institutions and co-funded under the European Regional Development Fund. The facility is equipped to sequence an entire human genome in a day. It will work closely with Systems Biology Ireland, the UCD Centre for Bioinformatics and the IEHG to develop a comprehensive genetic service and training for clinicians and scientists.





Education and Training

In January the new MSc in Clinical Nutrition and Dietetics commenced, the first such programme designed for graduates.

The year also saw the launch of the Physiotherapy Clinical Academic Group established between the physiotherapy departments in the Mater Misericordiae University Hospital, St Vincent's University Hospital and UCD. The combined clinical and academic partnership will further develop the discipline's education and research across the hospital group.



UCD Beacon Hospital Academy

The UCD Beacon Hospital Academy was launched in February. Alongside a growing undergraduate curriculum, graduate programmes and new research collaborations have commenced with INSIGHT on data analytics and connected health. The Academy recently moved into new interdisciplinary facilities, providing students with designated facilities while on placement in the Beacon Hospital.

Pictured receiving the 'Best Sustainable Healthcare Project Award' to the Mater Lean Academy at the Annual Irish Healthcare Awards are Mary Day; Sean Paul Teeling; Paula Guerin, Director of External Affairs, Abbvie; Dr Martin McNamara, Head of UCD School of Nursing, Midwifery and Health Systems; and Una Cunningham.

The Connected Health Early Stage Researcher Support System ITN (CHESS)

Funded by the European Commission through its Marie Skłodowska Curie programme, the Connected Health Early Stage Researcher Support System Initial Training Network will include inter-sectoral secondments, interdisciplinary communication skills, public engagement and outreach with particular focus on patient, clinician and policy-maker audiences.

Pictured at the launch of the UCD IEHG Cancer Clinical Academic Directorate are (l-r) Dr Eileen Furlong, UCD School of Nursing, Midwifery and Health Systems; Professor Des Fitzgerald, VP Health Affairs UCD/CAO IEHG; Mary Day,

Paediatrics UCD; Dr Patricia Fox, School of Nursing Midwifery

I would like to take this time to remember our colleague Professor Aongus Curren who so tragically died in August. May he rest in peace.

Finally, I would like to thank our colleagues in UCD and in the wider health system for their commitment to the pursuit of excellence through education, training, research and innovation in order to improve the delivery of and scientific discovery within healthcare.

Desmond Fitzgerald

Vice-President UCD Health Affairs/

Chief Academic Officer, Ireland East Hospital Group



Human Resources





Tristan Aitken Director of Human Resources

UCD Human Resources continues to focus on how we can best deliver a people strategy that is directly aligned with the University's 2020 Strategy. In this last year, in addition to the delivery of many successful initiatives designed to develop the potential of our people, we have, after extensive consultation, developed a new UCD HR Strategy. This has led to extensive reconfiguration of the function in order to best deliver this ambitious strategy over the next three years. The strategy is divided into four broad areas:

- 1. Transforming our service and partnership in order to deliver a simpler and more service-oriented offering to our customers enabling them to make better and faster people decisions.
- 2. Developing a performance culture that supports individuals and teams to focus on the delivery of key goals and excellent performance, while enabling them to grow and develop.
- **3.** Developing our talent by providing access to targeted learning and development interventions, ensuring our people are supported effectively and clearly in their daily work as they develop their careers and skills.
- **4.** Becoming recognised as a university and employer of choice based on the strength of our people and providing an environment that enables them to succeed.

UCD HR in 2016 has delivered and supported the following initiatives as part of the delivery of the 2020 strategy:

Transforming Our Service and Partnership

- Implemented a pathfinder project in Resourcing, in partnership with UCD Agile, to refine and simplify our processes to improve overall performance
- Created an online system to support postdoctoral researchers
- Introduced Garda vetting to support legislative best practice
- Designed and hosted an IUA HR national conference

Developing a Performance Culture

- Supported the development and implementation of a new Faculty and Technical Promotion Process
- Established an Extended Leadership Group for UCD and are creating a rolling programme for their development and continued contribution



Developing Our Talent

- Successfully concluded the 2015/16 Aurora Women in Leadership Programme and launched the 2016/17 programme
- Hosted a referendum and subsequently implemented changes to academic titles

Becoming recognised as a University and Employer of Choice

- · Key contributor to the Healthy UCD Strategy
- Establishment of the Equality, Diversity and Inclusion Group to address key issues and mainstream activities
- Created the Employee Consultative Group as a means of reframing our engagement with our recognised trade unions
- Collaborated with the Research community to deliver a successful University-wide Gender Equality Workshop

- Established a project group for our inaugural Culture & Engagement Survey, now launched
- Supported the three Development, Reward and Recognition groups over the past year, to deliver a significant set of people recommendations to UMT
- Commenced a comprehensive review and reform of three key policies Dignity and Respect, Disciplinary and Grievance

Our continued agenda for change and growth is ambitious, comprehensive and is being deployed in support of UCD's wider goals and ambitions.

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Tristan Aitken, Director of Human Resources



Conference delegates in the FitzGerald Debating Chamber during the Irish Universities Association HR Conference on 8 October, 2015.



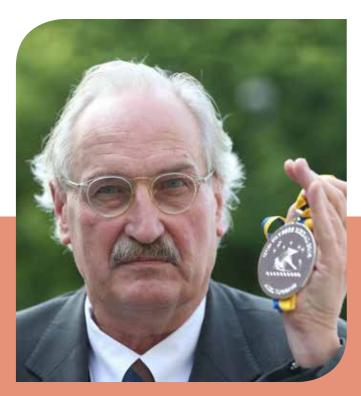


University Awards

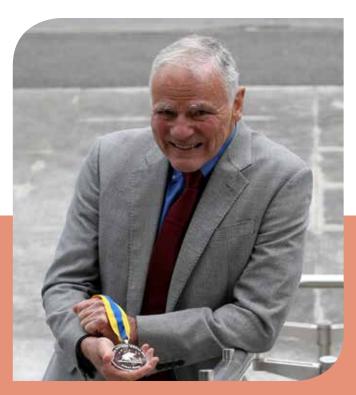
UCD Ulysses Medal



Professor Susan Haack in recognition of her outstanding contribution to the arts, in particular, philosophy and law.



Professor Axel Honneth in recognition of his lifetime contribution to social philosophy and critical theory.



 $\begin{tabular}{ll} \textbf{Dr Lee Hood} & \textbf{in recognition of his outstanding} \\ \textbf{contribution to science}. \end{tabular}$



Thomas Kilroy in recognition of his outstanding contribution to contemporary Irish literature.



Professor Jeffrey Sachs for his global contribution to economic development, global macroeconomics and the fight against poverty.

University Awards



UCD Alumni Awardees



Yvonne Farrell & Shelly McNamara
Architecture
Grafton Architects

Both recipients are adjunct professors at UCD, have been recipients of numerous awards and are published extensively internationally. They have exhibited in Dublin, Paris, Madrid and Zurich and have lectured widely in European and American Schools of Architecture.



Tom TynanAgriculture and
Food Science

Mr Tynan is celebrated for his phenomenal career in agriculture including his recent appointment to the cabinet of EU Agricultural Commissioner Phil Hogan.



Dr Jim Sheridan Arts Director

Dr Sheridan is one of the most celebrated film directors in the world. An Arts graduate who has written, directed and produced numerous award-winning films.



Nóirín O'Sullivan Business Garda Comissioner

With nearly 30 years professional policing experience, Ms O'Sullivan made history last November when she became the first female Commissioner of An Garda Síochána.



Dr Dave Burke
Engineering
VP for Engineering, Google

Dr Burke developed an online service called "Street Wise", one of the world's first mobile maps applications and now leads a team of over 300 engineers at Google.



Miriam O'Callaghan Law Broadcaster

Ms O'Callagan received the award for her contribution to broadcasting. She has been the presenter of RTÉ's leading current affairs show, Prime Time since 1996 and won an IFTA for Best TV personality.



Dr Patrick Bradley Medicine Leading Surgeon

Dr Bradley is widely recognised for his work and research in otorhinolaryngology: head and neck surgery. He has been appointed to the European Academy of Otorhinolaryngology and delivers lectures across the globe.



Virginia Pye
Nursing, Midwifery
& Health Systems
Director Public Health Nursing

Ms Pye was recognised for her innovative work in child welfare and health services. One of her greatest achievements was in 2014 when the HSE launched the Child and Family Needs Assessment Framework for Public Health. Midlands.



Rena Buckley
Physiotherapy
Chartered Physiotherapist
and GAA Superstar

Ms Buckley was recognised for her commitment to both sport and health. She is a Chartered Physiotherapist and one of the most decorated players in GAA history, having won 14 All-Ireland medals.



Dr Tony Holohan
Public Health
Chief Medical Officer, Department
of Health and Children

For over eight years, as Chief Medical Officer, Dr Holohan has had an instrumental role in health policy, including the ambitious cross-sectoral Healthy Ireland Initiative. He is regarded as a leader in the practice of evidence-based Public Health Medicine in Ireland.



Fr Peter McVerry Science Social Activist

Fr McVerry was honoured for dedicating his life to fighting poverty and homelessness. In 2013, the Peter McVerry Trust worked with almost 3,600 vulnerable youths.



Orlaith Blaney Social Science CEO. McCann Blue

Ms Blaney received the Social Science award for her contribution to the Irish advertising industry. When Orlaith was appointed managing director, at 32, she was the youngest and only MD of an international network agency in Ireland.



Dermot Weld Veterinary Medicine Racehorse Trainer

Mr Weld is globally admired for his accomplishments as one of Ireland's most successful racehorse trainers. He is also a dedicated veterinarian and Ambassador for Veterinary Education and Research.

University Awards

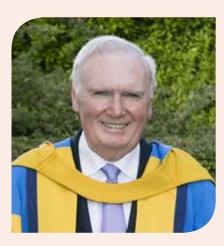


Honorary Degrees



Michael Dowling

1 September 2015. Distinction in the area of healthcare management and public service - Honorary Degree of Doctor of Science.



Dermot Gallagher

1 September 2015. Distinction in public service - Honorary Degree of Doctor of Laws.



Karsten Harries

2 September 2015. Distinction in philosophy, art history, architectural theory - Honorary Degree of Doctor of Literature.



Rosemary Cramp

3 September 2015. Distinction in the field of medieval archaeology - Honorary Degree of Doctor of Literature.



Áine Hyland

3 September 2015. Distinction in the contribution to education in Ireland at all levels and to Irish public life - Honorary Degree of Doctor of Literature.



Stephen Katz

2 October 2015. Distinction in Medicine, specifically in immunology and dermatology research - Honorary Degree of Doctor of Science.



Máire Geoghegan Quinn

2 December 2015. Recognition of "the transformational career of an Irish woman who, through action and example, has pioneered social change and driven innovation"- Honorary Degree of Doctor of Science.



Paul Haran

4 December 2015. Distinction in the area of management science and business administration, in particular contribution to public service - Honorary Degree of Doctor of Laws.



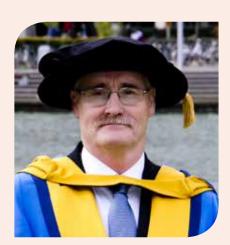
Maureen O'Hara

4 December 2015. Distinction in Finance - Honorary Degree of Doctor of Laws.



Gerard Hogan

25 April 2016. Distinction in Law - Honorary Degree Doctor of Laws.



Victor Laing

25 April 2016. Distinction in the fields of modern Irish history, in particular through the development and preservation of archives relating to military history in the period 1910 to 1923 - Honorary Degree of Doctor of Laws.



Catriona Crowe

25 April 2016. Distinction in archives, public history and promotion of national cultural institutions - Honorary Degree of Doctor of Literature.



Joe Lee

25 April 2016. Distinction in Irish History, as an academic with impact on public life, distinguished advocate of Irish Studies - Honorary Degree of Doctor of Laws.



V. Mohini Giri

7 May 2016. Distinction in the field of social work and social research - Honorary Degree of Doctor of Science.



Roy Foster

25 April 2016. Distinction in scholarship, particularly as a historian and literary biographer - Honorary Degree Doctor of Laws.



Michael Mann

25 April 2016. Distinction in academia - Honorary Degree of Doctor of Literature.



Conor Ward

2 June 2016. Distinction in Medicine (Paediatrics and Paediatric Cardiology) - Honorary Degree of Doctor of Science.



Appointments

New Appointments

The table below sets out the academic appointments in the period 1 September 2015 to 31 August 2016, to positions of Professor and Full Professor, and includes both new recruits to UCD and UCD staff promoted.

Full Professor Appointments

Professor James Devenney

Professor Fengzhou Fang

UCD School of Mechanical and Materials Engineering

Professor Federica Pazzaglia

UCD School of Business

Professor Ronan Powell

UCD School of Business

Professor Andy Prothero

UCD School of Business

UCD School of Medicine

Full Professor Promotions

Professor Danielle Clarke

UCD School of English,

Drama and Film

Professor Sheila O'Donnell UCD School of Architecture,
Planning and Environmental

Policy

Professor Appointments

Professor Kalpana Shankar

UCD School of

Information and

Communications Studies

Professor Promotions

Professor Porscha Fermanis

UCD School of English,
Drama and Film

Professor Suzanne Kingston

UCD School of Law

Professor Valerio Poti

UCD School of Business



Retirements

Academic Affairs

IT Services

Seamus Shaw

Seamus Shaw, UCD's Chief Technology Officer, retired in July 2016. Seamus joined UCD in 2000 and was responsible for University-wide IT Services. During his 16 year tenure, he had a clear focus on customer service as well as programme and project prioritisation and delivery. We wish Seamus all the best in his retirement.

Registry

Sandra Doyle

Sandra Doyle retired from Administrative Services in November 2015 having worked in UCD since 1977. Sandra worked in the Registrar's Office/Registry for most of her career but her most recent role was as a key member of the Student Records team, where her insight and experience was greatly valued.

Library

Stella Bowers

Stella joined UCD Library in March 1981 and retired in 2016. Stella worked for the majority of her career in the Collections Management area, where her accuracy and careful attention to detail made her a much valued member of the team.

Helena Finnegan

Helena joined UCD Library in October 1992 and retired in 2016. Helena worked as a Library Assistant in Client Services providing service and guidance to users.

Maria McCormack

Maria joined UCD Library in July 1997 and retired in 2016. She worked as a Library Assistant in Client Services providing service and guidance to users.

Sarah McLaughlin

Sarah joined UCD Library in October 2007 and retired in 2016. Sarah was a Duty Librarian and worked mainly at evenings and weekends. Her career in UCD was characterised by her calmness under pressure and her commitment to quality service for all.

Maeve Tannam

Maeve joined UCD Library in August 2000 and retired in 2016. During Maeve's career, she worked in the Nursing Library in Ballsbridge, the Richview Library and most recently as Senior Library Assistant in the Health Sciences Library. Her tact and wisdom were greatly valued.

Estate Services

Miss Margaret Wyer

Margaret joined UCD in November 1978 and was a telephonist on the UCD Switchboard, providing a friendly voice and service to colleagues across the campus. She retired in November 2015.

Retirements

UCD Research

UCD Conway Institute

Pádraig O Murchú

Pádraig gave 47 years of dedicated service to UCD. After starting within the Department of Pharmacology as an animal attendant in February 1969, Pádraig found his real vocation in the mechanical workshop. He undertook a range of part-time courses and has qualifications in mechanical engineering, electronics, refrigeration engineering, and fitting & turning. Since 2003, Pádraig has run the mechanical workshop in UCD Conway Institute, serving the needs of the research community. His skill level and problem solving ability is immense. Pádraig designed and built a wide range of mechanical housings for items such as biological stimulators and electrophoresis power supplies in large batches as well as 'once-off' designs built to bespoke specification. Nothing he ever built failed mechanically. He provided an invaluable service, his commitment and dedication have been exemplary and he will be sorely missed by his colleagues.

Chaplains

Rev John McNerney

Fr John joined UCD Chaplaincy in 1994 and served as head chaplain for more than half his tenure until his retirement in February 2016. As well as the administrative and leadership function his role as head chaplain entailed, he was an outstanding pastor, giving solace and comfort to a host of students and staff at critical or challenging moments in their lives. This was most evident in cases of student tragedies (including a not insignificant number of student suicides) where Fr John was actively and compassionately present for the families and friends of the bereaved. He also chaired the Student Welfare Committee over many years and was, as a result, au fait with the real difficulties of students and proactive in helping find a solution. He was also awarded a PhD in Philosophy from UCD which he used to good effect in bringing his unique blend of philosophical reasoning and Christian theology to bear on his academic and pastoral engagement with the University.

College of Arts and Humanities

School of Art History and Cultural Policy

Professor Paula Murphy

Paula began teaching art history in UCD in 1980, specialising in art of the modern period. Her research has concentrated on Irish sculpture, for which she was awarded the RHA Gold Medal in 2015. Her most recent publication is the Art and Architecture of Ireland, Vol 3 Sculpture 1600-2000 (Yale, 2014).

School of English, Drama and Film

Dr Catherine Leeney

Cathy lectured in drama studies from the early 1990s where her passion for theatre was communicated to several generations of students. She has been at the forefront of Irish theatre scholarship, publishing the ground-breaking Irish Women Playwrights, 1900-1939 (2010), co-editing The Theatre of Marina Carr (2003), and selecting and introducing the first collection of new plays by Irish women, Seen and Heard (2001).

Professor Anthony Roche

Tony joined the School of English, Drama and Film in 1990 where he made a stellar contribution to the teaching, research and cultural life of the School. His many publications include The Irish Dramatic Revival, 1899-1939 (2015); Synge and Modern Irish Drama (2013) and Contemporary Irish Drama [Second Edition] (2009).

School of Languages, Cultures and Linguistics

Dr Annette Flynn

Annette joined UCD in September 2002 where she worked in the School of Literature and Languages (now the School of Languages, Cultures and Linguistics). She worked as a college lecturer in subject area of Spanish. She retired from UCD on the 1st of January 2016.

College of Business

Sheila Baynes

Sheila retired in March following a 30 year career. She started with the Accountancy Subject Area in the Diploma in Professional Accounting (DPA), now the Master of Accounting Programme, in 1986 and was based in Roebuck Castle. She moved to the Blackrock campus in 1990 and continued to work in the Smurfit School Programme Office in the mornings, and the Veterinary Medicine Programme Office in Belfield in the afternoons. Sheila made a significant professional and personal contribution to the Business and Veterinary Schools during her career.

Dr Dan Golden

Dan retired from his role as lecturer in finance in May 2016. He is an engineering graduate of Princeton University and undertook his doctorate at the University of North Carolina at Chapel Hill. Dan joined UCD in September 1996 and was a valued academic in both the Smurfit and the Quinn Schools. During his tenure Dan established the very successful Smurfit MSc in Quantitative Finance and was also Director of the MSc between 2003 and 2007.

College of Engineering and Architecture

School of Architecture, Planning and Environmental Policy

Gerard Cahill

Gerry, a Studio Lecturer, taught in the architecture programme for over 30 years. Over that time, he has made a profound impact. He has been an inspirational teacher, enthusing generations of students with his deep commitment to the social role of architecture, his insights into the design process and his love of drawing and sketching.

Michael Murphy

Michael ran the Building Laboratory in Richview since 2001, transforming it into a vital space for teaching and research. He always encouraged and supported students in making models and experiments. His ran workshops explaining construction and craft techniques, drawing on his own knowledge and expertise. He had a significant influence on the culture of the school.

College of Health and Agricultural Sciences

Lyons Farm

Michael Hegarty

Michael joined UCD in 1970 and spent his career supporting agriculture and veterinary medicine programmes at UCD's teaching and research farm facilities.

School of Nursing, Midwifery and Health Systems

Anne Marie Fahy

Anne joined UCD in August 2006. She worked as a lecturer in children's nursing and was a key member of faculty in ensuring the successful transition of children's nursing education from the hospital to the University.

School of Medicine

Bríd McCormack

Brid joined Forensic and Legal Medicine in the School of Medicine in 1997 and retired this year. She was the specialty's sole and invaluable administrator as Executive Assistant for more than 18 years and served with unforgettable and utmost dedication to her colleagues, students and the School.

Gary Perry

Gary joined UCD in 1985 as a laboratory attendant in the Diagnostic Laboratories of Pathology (School of Medicine). He was subsequently promoted to technical officer in Anatomy. In 1998 he became co-ordinator of the Body Donor Programme and continued that invaluable work until his recent retirement.

School of Veterinary Medicine

Professor Stephen Carrington

Stephen joined UCD as Professor of Veterinary Anatomy from the Veterinary School at Bristol in 1999 at a time when the Faculty of Veterinary Medicine was planning its move to the Belfield campus. He first qualified in Veterinary Medicine and Surgery from the University of Edinburgh. He has a PhD from the University of Liverpool and expertise in Veterinary Ophthalmology. In his time at UCD, he was Head of Veterinary Biosciences and led a well-funded and highly effective research group of graduate students and postdoctoral Fellows. Steve is passionate about the teaching of veterinary anatomy to future veterinarians and has led many innovative modules in the area. He has made major contributions to the progress of the UCD Veterinary School since its move to Belfield in 2002.

National Virus Reference Laboratory

Anne Casey

Anne joined the National Virus Reference Laboratory at UCD as Executive Assistant in 2005 and was a key member of the administrative team. Anne's commitment to her work throughout her career was unparalleled.

Winifred O'Connor

Winnie joined the National Virus Reference Laboratory at UCD in December 1993. As a Senior Technical Officer, she performed a wide range of diagnostic viral investigations on patient samples. Her dedication and enthusiasm to her role was exemplary.

Coombe Family Practice

Deirdre Langton

Deirdre joined UCD in February 1996 and retired in March 2016. She was a practice manager based at the Coombe Family Practice.

College of Science

UCD School of Biology and Environmental Science

William Clarke

Billy was a member of the technical staff from 1980 until 2015. He started at UCD with the Ecology Groups lead by Professor John Bracken and Dr Brenda Healy, followed by work with Dr Michael Ryan on the Chemical Ecology of insect-plant relationships. From 1999 until his retirement he worked on Mammal Ecology with Prof Tom Hayden. He is also known as an accomplished photographer; in the 1990s he illustrated two books on the birds of West Africa and another on Irish mammals. His wildlife photography passion continues now in his retirement.

Professor Philip Newsholme

Philip joined the Department of Biochemistry in 1993, studying the regulation of insulin secretion and metabolic adaptions to exercise. In 2008, he was appointed Head of Biochemistry in the School of Biomolecular and Biomedical Science. At present, Professor Newsholme is Head of the School of Biomedical Sciences at Curtin University, Australia.

School of Earth Sciences

Professor Ian Somerville

Ian joined the UCD Department of Geology in 1979, becoming Senior Lecturer in 1996 and Associate Professor in 2008. His research interests include carboniferous palaeontology and biostratigraphy. Ian inspired generations of students in the classroom and field. He is now an Emeritus Professor in the School of Earth Sciences.

College of Social Sciences and Law

UCD School of Philosophy

Professor Gerald Casey

Gerald served as Head of School and as an elected member of the Governing Authority during a thirty-year career at UCD in which he advanced knowledge and education in a number of fields, including libertarian and moral philosophy.

Professor Fran O'Rourke

Fran contributed extensively both to the field of classical metaphysics and to Joycean scholarship during a distinguished career at UCD, which included teaching across a wide a range of philosphical fields.

UCD School of Sociology

Dr Anne Cleary

Anne has been a Fulbright Scholar and IRCHSS Senior Scholar, and Deputy Head of School during a UCD career in which she has made extensive contributions to the sociology of health and well-being and gender, and to development of education and scholarship in the field of sociology in Ireland.











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