

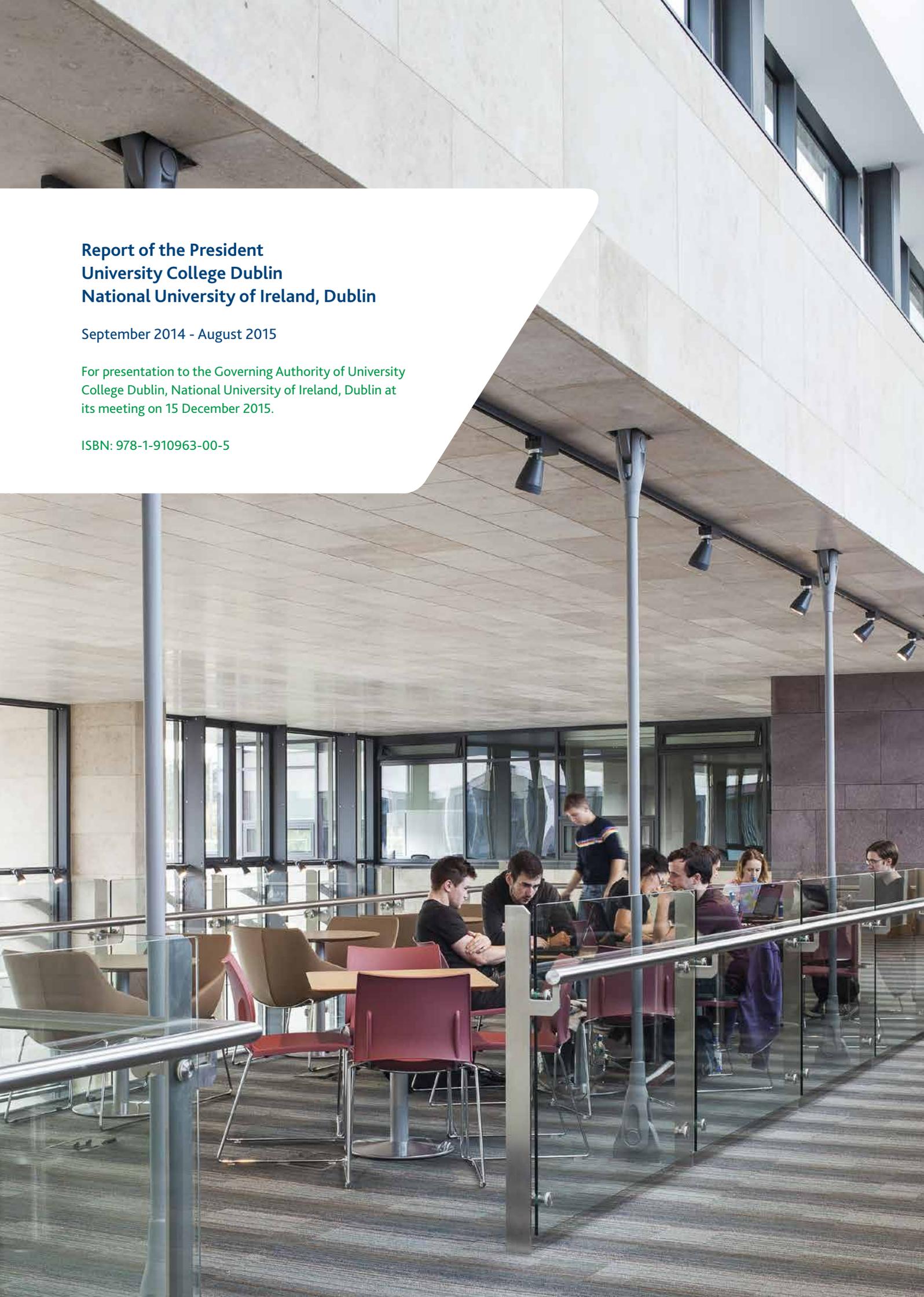


University College Dublin

Report of the President

September 2014 - August 2015





**Report of the President
University College Dublin
National University of Ireland, Dublin**

September 2014 - August 2015

For presentation to the Governing Authority of University
College Dublin, National University of Ireland, Dublin at
its meeting on 15 December 2015.

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UCD's parkland Belfield campus.



**Professor
Andrew J. Deeks
President**

The period of this Report covers my first full academic year at UCD. As you will see from the contents, the year has been busy and productive. Over this year there has been a significant improvement in the Irish economic outlook. Although the benefits of this improvement are yet to flow through to the university sector, we can at least be confident that the worst is over. We now need a concerted campaign to ensure that the total amount of money UCD receives per Irish student returns to levels comparable with our international competitors, and the HR constraints we have been under during the period of austerity are lifted.

Despite the severe financial constraints, the performance of UCD in all aspects has improved over the year, and I congratulate all our faculty and staff for their hard work and contribution during this time.

Inaugural Lecture

In November 2014 I was honoured to give my inaugural lecture, which embraced the theme of the idea of a global university. Drawing from Newman's *The Idea of a University*, and his spirited defence of the value of a liberal education, I sought to reinforce the values and principles of a comprehensive, research-intensive university education in today's global setting.

It is my contention that strong connectivity between disciplines, between scholars within the University and across the international academic community, and between the University and outside partners, is crucial.

I believe our role is to develop in our students the ability to understand a subject matter by considering a variety of viewpoints. This interdisciplinarity promotes societal

advance and prepares our students to take their place in and to contribute to the flourishing of society. Similarly, exposure to and participation in research is a vital part of the training of the mind that Newman was so passionate about, as well as being a primary goal of the University.

To prepare our students to flourish in this interconnected global society, we need to be a global university. We must be engaged nationally and around the world. Different points of view do not only come from within the University, but from the outside, too. We must also promote international mobility of staff and students, joint research and teaching programmes with other global universities, and mutually beneficial strategic holistic partnerships. All this is contained in the Strategy we launched this year.

UCD Strategic Plan 2015-2020

Building on the in-depth consultation process initiated in January 2014 when I took office, we published our new Strategy 2015-2020 in November. In launching the plan, the Minister for Education and Skills, Jan O'Sullivan TD, made it clear she recognised the status and achievements of the University as well as the importance of UCD in the context of broader national strategy. I believe our new plan will build on and strengthen this reputation both in Ireland and abroad, making UCD truly Ireland's global university.

The UCD Strategy 2015-2020 sets out a vision for 2020 and establishes 10 key objectives which we are pursuing to achieve this vision. These key objectives have begun to shape our planning and decision making at all levels of the University. In addition to supporting our vision, the Strategy outlines six major strategic initiatives which are being coordinated by the University Management Team (UMT).

I am pleased to report that the consultation, planning and initial implementation stages of our new Strategy have benefitted greatly from widespread engagement by UCD faculty, staff, students, external stakeholders and supporters. I value this engagement and thank you all for your input and ongoing support.

In January this year, we set about tackling Objective 3 of our Strategy, which is to consolidate and strengthen our disciplines. Following external comparison and an extensive process of internal consultation and consideration, a set of new academic structures to align with and support our strategic plan were agreed for rollout in September 2015. I am grateful to Professor Colin Scott, Principal UCD College of Human Sciences, who chaired the Restructuring Implementation Working Group.

University Governance and Management

I was delighted at the appointment of Mr Eugene McCague and Mr Charles Coase as chair of the Governing Authority and chair of the UCD Finance, Remuneration and Asset Management Committee, respectively. I am deeply grateful to both for agreeing to take on these important roles and for the support they are providing to UCD.

Following an international search and selection process, the Governing Authority announced the appointment of Professor Mark Rogers as Deputy President, Vice-President (Academic) and Registrar. Mark was the outstanding candidate for the role and has already demonstrated his academic leadership and management skills in driving Objective 2 of our Strategy to define educational excellence. Mark is working with colleges and schools to ensure we provide an educational experience to all our students that defines international best practice.

Global UCD

In support of our Global Engagement Strategy, 2014/15 saw the expansion of our network of Global Centres. In addition to the existing centres in New York and Beijing, we opened centres in Chicago, San Francisco, New Delhi and Kuala Lumpur. Our Global Centres facilitate our connections with a region, supporting student mobility both ways, research partnerships and engagement with alumni.

UCD President, Professor Andrew Deeks (centre) congratulates the four new UCD members of the Royal Irish Academy (RIA), pictured (l-r): Professor Ian O'Donnell, UCD Sutherland School of Law; Professor Orla Feely, UCD School of Electrical, Electronic and Communications Engineering, and UCD Vice-President for Research, Innovation and Impact; Professor Geraldine Butler, UCD School of Biomolecular and Biomedical Science and UCD Conway Institute; and Professor Nicholas Daly, UCD School of English, Drama and Film.



Alex Murphy, UCD Swimming team, collects the Elite Team of the Year Award on behalf of his team from UCD President, Professor Andrew Deeks, at the Bank of Ireland UCD Athletic Union Council Sports Awards.



Rankings

While the metrics used for the various world university rankings may not be universally agreed, they are used by prospective students, faculty and staff, collaborators and partners as a means of assessing a university's standing. This year brought mixed results: QS World University Ranking ranked UCD in the same place as the previous year, at 139th, which is a good result for UCD compared to the falls experienced by most other Irish universities; but the Times Higher Education (THE) ranking concluded that UCD had fallen out of the top 200.

As I have stated publicly, the student/faculty ratio is a serious issue, and can only be addressed properly through a change in the funding of Irish universities and a lifting of the Employment Control Framework constraints we are currently operating under.

All objective indicators show that UCD is a great university doing very well, given the constraints of this period of austerity. However, if we are to continue to compete with Australian and UK universities in the future, Government must ensure that the total money Irish universities receive per student is increased to a level similar to our competitors.

Education

The UCD Strategy 2015-2020 provides a clear direction for building on our impressive education reputation and this year saw preparations, among other developments, for a comprehensive review and redesign of our curriculum, as will be outlined by Professor Mark Rogers, Deputy President and Registrar.

A UCD education is highly valued, both in Ireland and internationally, as demonstrated by UCD continuing to be both the *University of Choice*, with the largest number of CAO first preferences for Irish students, and the *University of First Destination* for international students seeking to study in Ireland. I am delighted to report that in line with our strategic objectives, UCD is now home to some 6,600 international students with a further 5,600 studying overseas.

The social diversity of our student body continues to grow with more students from under-represented groups and the increasing diversity of our international student population. This diversity is a real strength for UCD, empowering a holistic education and the development of global citizens.

Research, Innovation and Impact

Excellence in research and innovation is core to our Strategy and UCD researchers once again demonstrated their calibre by attracting €107 million in external competitive funding. With the reductions in State sponsored research, our focus is on European Commission funding under Horizon 2020 which has grown to almost 20% of our research income in 2014/15. Professor Orla Feely, Vice-President for Research, Innovation and Impact, will outline the other significant research and innovation developments in her report.

In May, An Taoiseach Enda Kenny TD launched our report *Delivering Impact: The Economic, Cultural and Social Impact of University College Dublin*. The report underlines UCD's role as a major economic actor and employer in Dublin and Ireland, and demonstrated that, as well as the significant financial contribution UCD makes to the Irish economy, the work we undertake has a substantially broader social and cultural impact.

The key findings outlined in the report include an impressive, annual economic output of €1.3 billion, which has been generated by UCD and our students in Ireland. The total number of jobs supported is 8,914.

UCD's Decade of Centenaries programme, funded by UCD Research, was launched in April. This is an excellent example of the depth and breadth of our scholarship across history, English, Irish, music, politics, archaeology and geography. The programme is designed to inform national debate and understanding of the period from 1912 to 1923, and to profile the many unique papers, documents and photographs held by UCD Archives, Library Special Collections and National Folklore Collection. See www.ucd.ie/centenaries for a full list of events and resources.

UCD Foundation

UCD Foundation continued to fulfil a critical strategic role supporting UCD'S priorities in 2014/15. This was made possible through the support of 5,555 donors and friends who generously commit to the ongoing development and expansion of the University's infrastructure and intellectual capital. I am very grateful to these donors for their generosity and willingness to be part of UCD today. My sincere thanks also to our hard-working Foundation Boards: UCD Foundation, Ireland; Friends of UCD, UK; and John Henry Newman Foundation, USA. Your guidance and support has been invaluable over the year.

Philanthropic funding is essential to the fabric of UCD and enables the University to disperse funds to our most urgent priorities. The five priority projects during the year included the campaign for UCD School of Business, UCD Confucius Institute for Ireland, the Ulysses Centre at Newman House, scholarships, and Newman Fellowships.

This year, we began to see the full impact of *Extending our Edges of Excellence*, the Campaign for UCD School of Business aimed at generating additional resources, stronger links with the business community and a more engaged alumni body. Seed funding was secured for a Chair in Aviation Leasing, Finance and Law, and a Chair in Operational Risk Management, both reflecting areas of growing importance for Ireland and the global economy.

I would like to extend special thanks to the Campaign Cabinet, a group of eleven business leaders, who are championing the Campaign for UCD School of Business and ensuring its continued success.

A leadership gift from one of UCD's closest friends, Martin and Carmel Naughton, and a Government grant of €2.5 million through Fáilte Ireland's Capital Programme, has enabled plans to get underway to establish the UCD Ulysses Centre, a landmark public venue celebrating Irish culture, heritage and literature in the historic Newman House, on St Stephen's Green. The facility will include a multimedia and interactive exhibition on UCD alumnus James Joyce and other great Irish writers, as well as lecture, performance and exhibition spaces. The project is being led by Professor Margaret Kelleher and Eamonn Ceannt.

Scholarships are the single most powerful tool in ensuring the University can recruit the brightest students and offer world-class education to the leaders of tomorrow, regardless of their financial means. I am proud to say the generosity of our donors allowed UCD to award 345 scholarships in 2014/15.

Through the support of a range of companies and trusts and foundations, UCD Foundation funded 20 high-achieving post-doctoral Newman Fellowships, who are conducting varied and interdisciplinary research of global significance.

Reconnecting with Alumni

Central to UCD's success in 2014/15 was the outstanding contribution of many of our ever-growing alumni community, who continued to advance the reputation of the University by raising our international profile, impact and reach.

On Bloomsday 2015, UCD honoured six outstanding academics whose work in the sciences has made an extraordinary contribution to society. Pictured (l-r) are: Professor John Hearn, Professor Margaret Murnane, Professor Dervilla Donnelly, UCD President, Professor Andrew Deeks, Professor Diana Harrison Wall, Professor Julie McEnery, and Dr John M Brown.





Pictured (l-r) at the launch of UCD's USA Global Centre in April are: Barbara Jones, Consul General of Ireland in New York; UCD President, Professor Andrew Deeks; and the Ambassador of Ireland to the United States, H.E. Anne Anderson.

In September, to help our 220,000 alumni in 159 countries stay connected, we launched our new alumni network (www.ucd.ie/alumni). In time this network will also help support UCD Foundation's work.

At the inaugural Foundation Day Alumni Awards in November, we celebrated the achievements of some of our most notable UCD alumni who have enjoyed success at the highest level. Thirteen awards were presented to alumni on the night for exceptional contributions in their various programme fields.

Over the past 12 months during my travels abroad I have been fortunate to meet with more than 900 alumni at events in India, China, the UK, Kuala Lumpur and the East Coast of the US. The opening of UCD's new Global Centres will add impetus to future activities focusing on alumni.

This year we also launched UCD's first pilot undergraduate career mentoring programme where ten alumni volunteered to act as mentors to students for the duration of the three month programme. MBA alumni in the UCD Michael Smurfit Graduate Business School also volunteered to take on the role of mentors for MBA students. I would like to thank our mentors for taking the time to give back to UCD and our current students.

I would also like to thank the more than 13,000 alumni who supported UCD over the last year by attending events on campus and overseas, through volunteering their time and for their financial support for which UCD is extremely grateful. Through the *UCD Champions - Changing Futures* campaign, alumni firmly demonstrated their support for UCD by contributing more than €1 million in funding for scholarships, which meant our alumni doubled the number of scholarships they support in 12 months. I am confident that the ongoing support of our alumni will continue to make UCD a truly outstanding university for many years to come.

Staffing Initiatives and HR Policy Developments

As set out in our Strategy, UCD values excellence and understands that excellent performance requires excellent people working in a supportive environment. Our Strategy aims to put in place appropriate support measures to develop and retain the members of our community so that we can continue to attract excellent and diverse students, faculty and staff from around Ireland and the world.

The Strategy commits to working to ensure that the University's faculty and staff are enabled to achieve their full potential and are appropriately rewarded for their contribution. In addition, it sets out that a performance development programme should be put in place, having undertaken a full review of our promotion procedures, training processes and leave provisions.

During the year three working groups were established and tasked with making recommendations to the University Management Team (UMT) with regard to faculty, technical officer and staff development, reward and recognition. These are expected to furnish initial recommendations by December 2015.

Significant advancements took place in a number of key technology enabling projects, instigated by UCD HR, to streamline HR processes. UCD HR was also very active in supporting change in the Schools and Colleges arising from the planned academic restructuring.

During the past year, HR has taken a lead on the introduction and rollout of a number of people development initiatives. The Aurora Leadership Programme is one such initiative which was launched and piloted. This is an innovative leadership development training programme aimed at women up to senior lecturer and equivalent professional services level.

Our Strategy sets out a commitment to have a diverse and inclusive University community, and advance plans were put in place to establish a University Management Team Equality, Diversity and Inclusion sub-group for September 2015.

Objective 10 in our new Strategy is to overcome external constraints. The chairmanship of the Irish University Association (IUA) rotates amongst the seven Irish university presidents and I took over this role for 2015. As we approach the end of the Haddington Road agreement, and the Government considers how to ease the Employment Control Framework with respect to the universities, the university sector needs to work together to ensure the various HR constraints we are under are eased in a sensible and effective way. The IUA has an important role to play in the process, and I have worked and will continue to work with my fellow university presidents to advance these issues.

Berkeley Tragedy

The loss of any member of the UCD community is a tragedy and one that is felt deeply. The loss of six young Irish students working in the US over the summer, however, was a tragedy that affected the country as a whole. The UCD community was shocked and saddened by the loss of three students on 16 June 2015: Eimear Walsh (3rd Med), Lorcán Miller (3rd Med) and Niccolai Schuster (2nd BA History and Politics), as well as the injuries to other UCD students. I was very proud of the UCD community and the overwhelming response to the needs of our students both in Berkeley and at home. The outpouring of sympathy

resulted in some 20,000 faculty, staff, students and friends of UCD signing our online book of condolence. This will be presented to the bereaved families at the beginning of the new academic year when we dedicate the UCD Rose Garden to those students lost in this tragic accident and all students who died while studying here.

On behalf of the entire University community I extend our deepest sympathy to the families and friends of those killed and injured. In the memorial service held a few days after the accident I took a line from our alumnus James Joyce, from *Finnegan's Wake*: "They lived and laughed and loved and left", to express our community feeling. And we will not forget them.

In Conclusion

I would like to thank the members of the University Management Team for their advice and support. You will find their individual reports in this volume. I would also like to thank the members of the UCD Governing Authority for their support and dedication to UCD.

It has been a very satisfying and rewarding year highlighted by the engagement of faculty, staff, students and friends of UCD in the development and implementation of our Strategic Plan 2015-2020. I know that building on a very sound base we have the potential, the ability and the ambition to achieve a great deal together in the coming years. I look forward to updating you next year on further progress.



Professor Andrew J. Deeks
President

31st August 2015

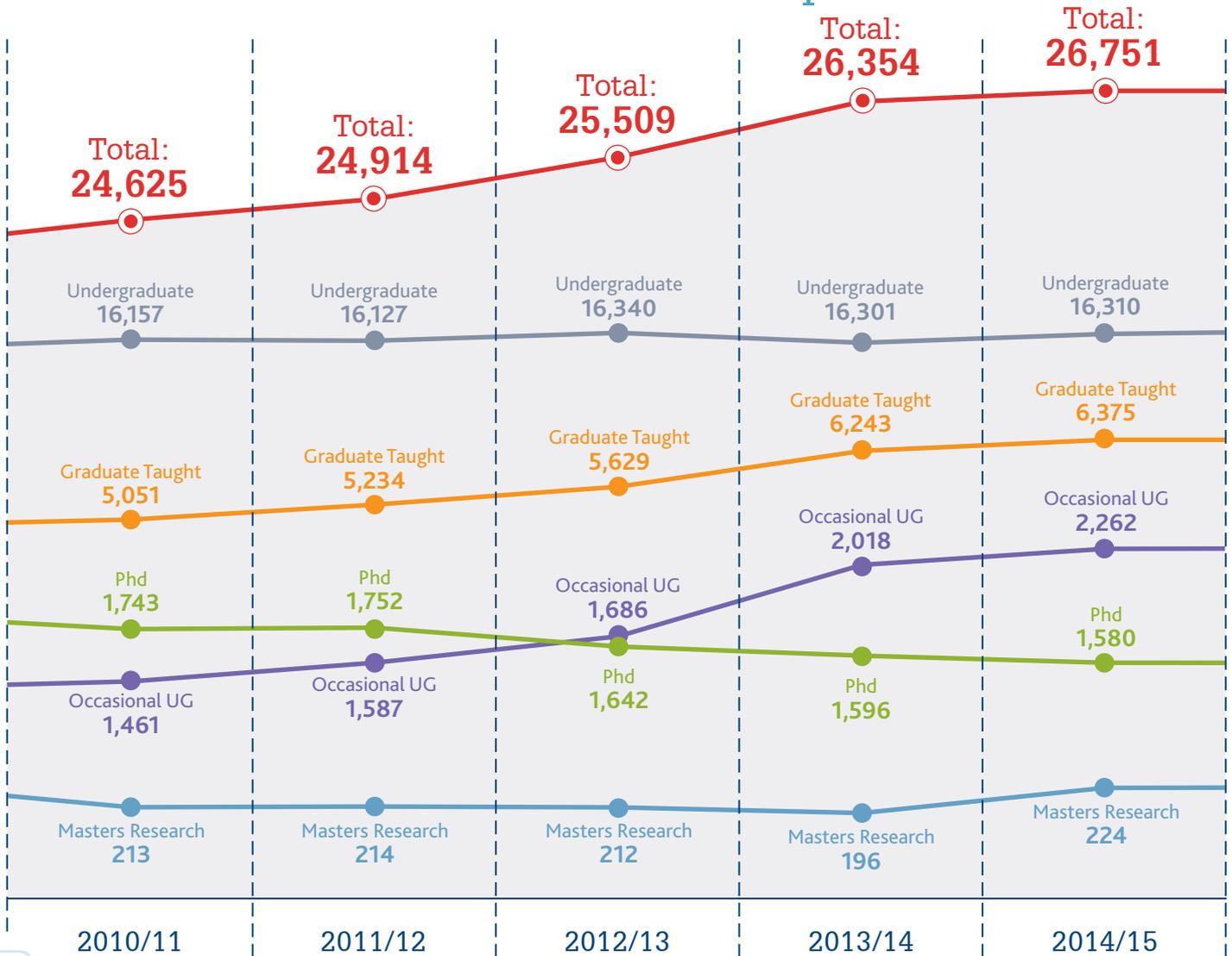
Pictured (l-r) at the launch of the extension of the Athena SWAN Charter to Ireland are: Dr Maria Meehan, UCD School of Mathematical Sciences; Professor Andrew Deeks, UCD President; Professor Orla Feely, UCD Vice-President for Research, Innovation and Impact; Professor Mark Rogers, Deputy President and Registrar; Dr Sheila McBreen, UCD School of Physics; Dr Patricia Maguire, UCD Conway Institute.



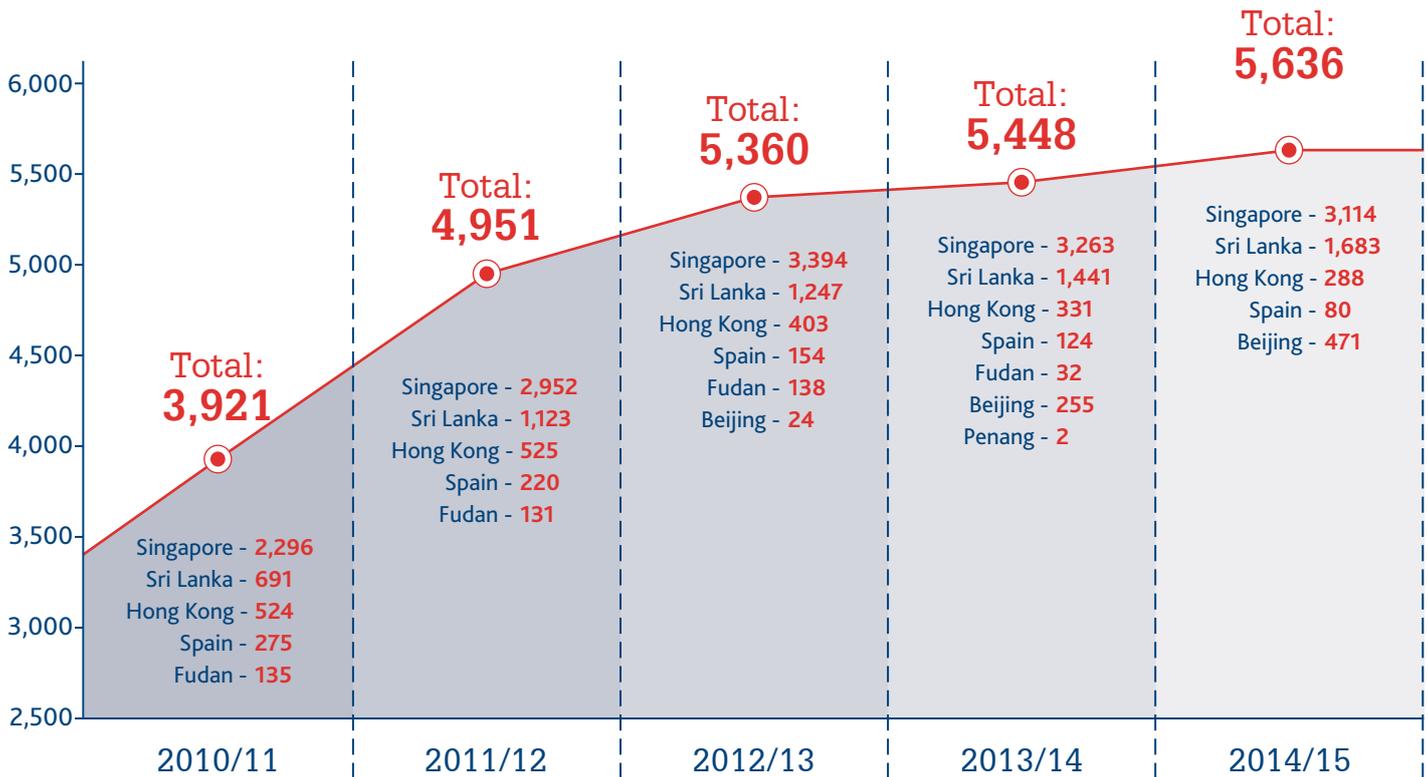


UCD Student Centre.

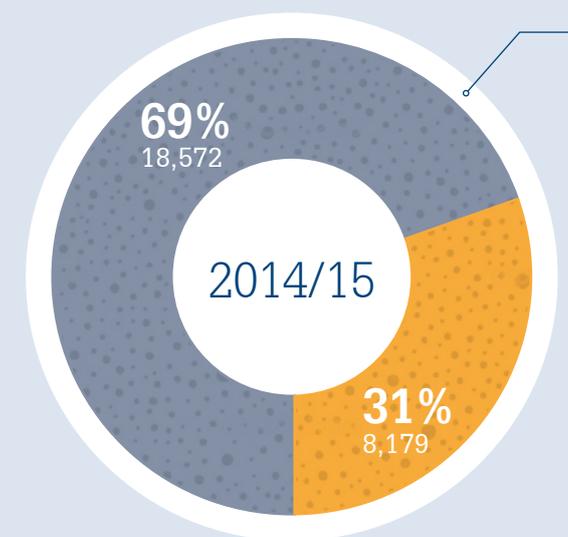
UCD Student Statistics Ireland Campuses



UCD Student Statistics Overseas Operations



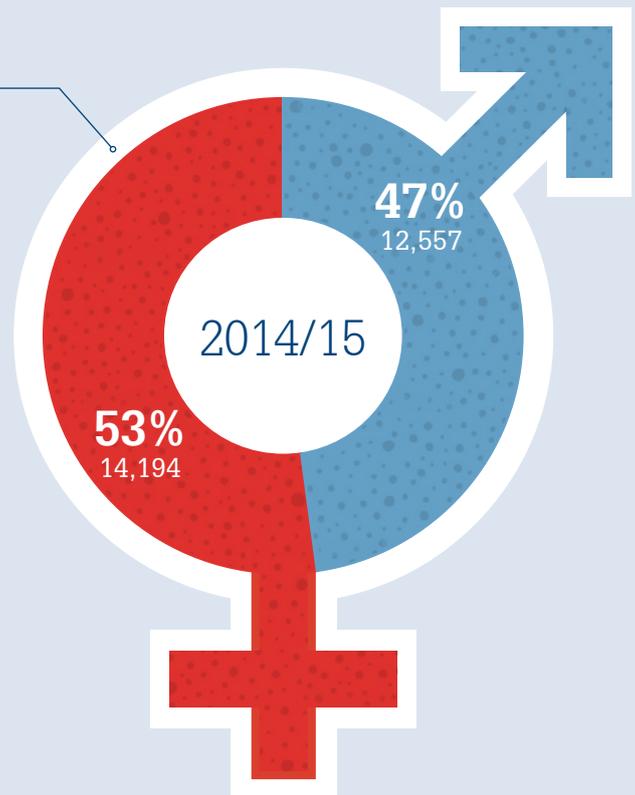
UCD Undergraduate/Graduate Breakdown



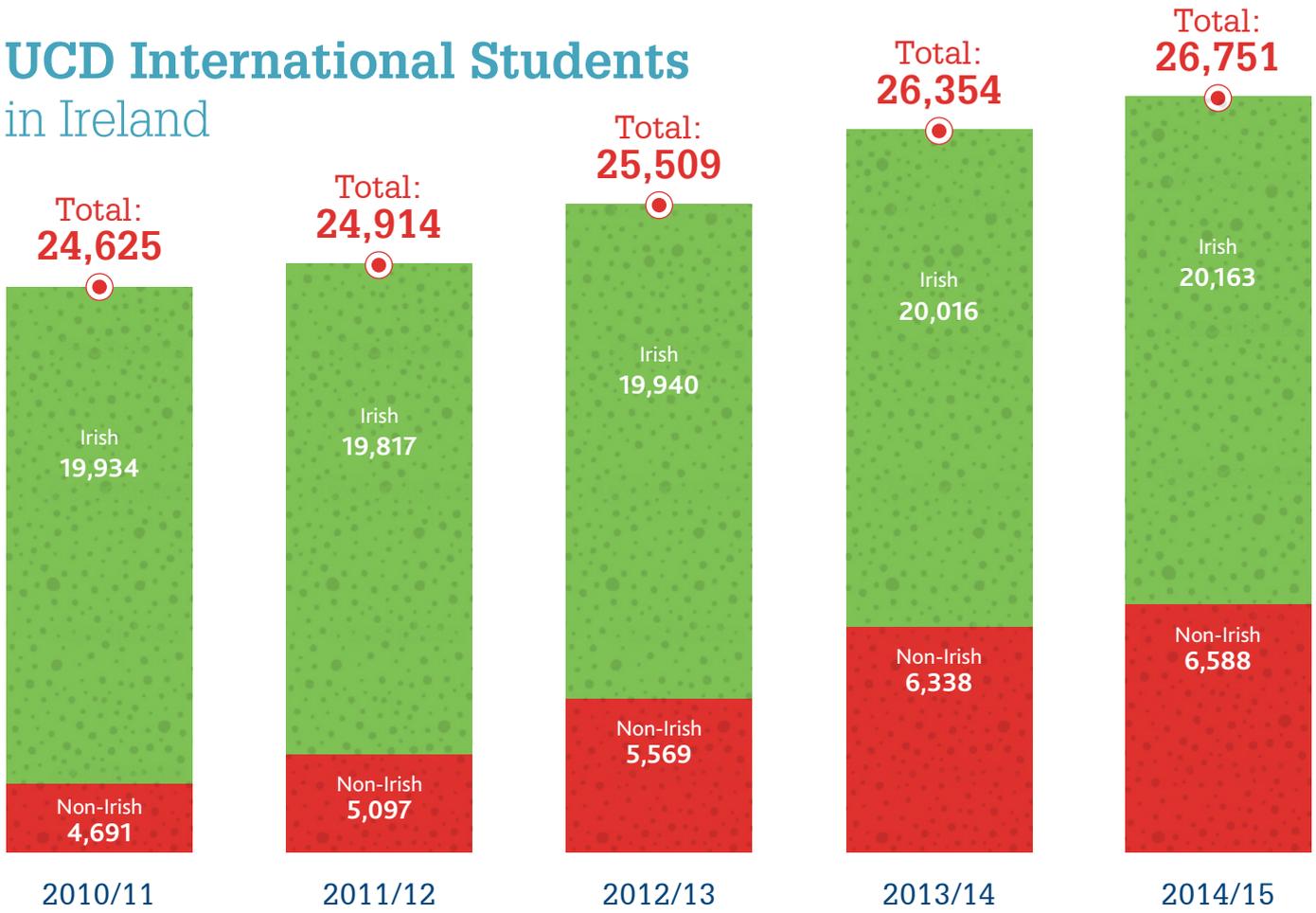
Undergraduate Graduate

UCD Male/Female Students

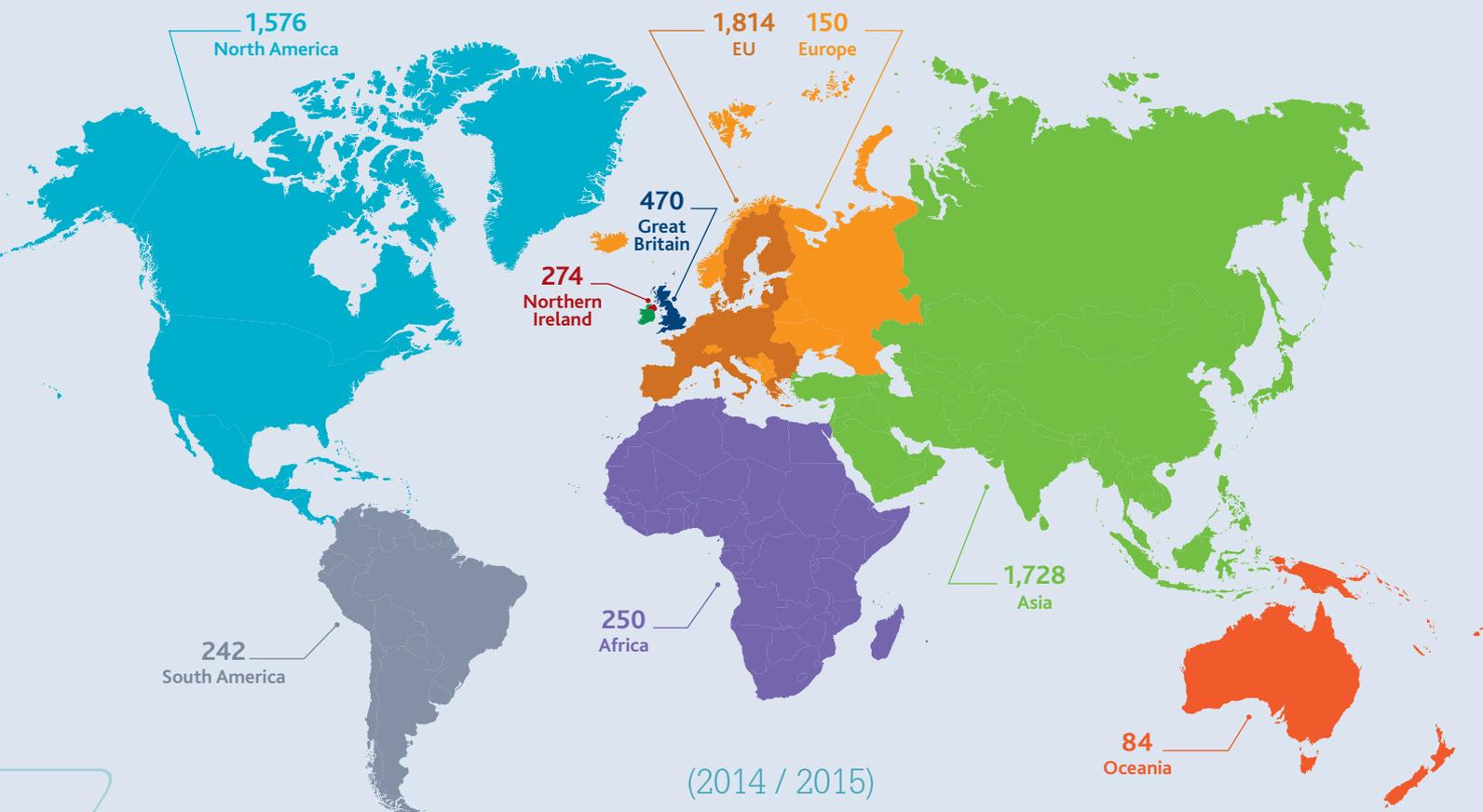
100% 26,751
in Ireland



UCD International Students in Ireland



UCD International Students by Region



UCD Undergraduate and Graduate Numbers by Discipline (Ireland 2014 / 2015)

Subject Area	Undergraduate	Graduate	Total
Generic Programmes and Qualifications	362	-	362
Education	-	377	377
Arts and Humanities	3,920	404	4,324
Social Sciences, Journalism and Information	1,509	685	2,194
Business, Administration and Law	3,554	2,367	5,921
Natural Sciences, Mathematics and Statistics	1,926	823	2,749
Information and Communication Technologies (ICTs)	317	529	846
Engineering, Manufacturing and Construction	1,623	811	2,434
Agriculture, Forestry, Fisheries and Veterinary	1,823	428	2,251
Health and Welfare	3,418	1,744	5,162
Services*	120	11	131
Grand Total	18,572	8,179	26,751

*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

1. Republic of Ireland  166,781	6. Sri Lanka  2,809	11. Germany  687	16. Italy  380
2. Singapore  8,132	7. Hong Kong  2,475	12. Malaysia  668	17. Belgium  311
3. England, Scotland, Wales  4,303	8. People's Republic of China  1,526	13. India  658	18. The Netherlands  256
4. USA  3,766	9. Spain  1,103	14. France  631	19. Vietnam  201
5. Northern Ireland  3,005	10. Canada  1,000	15. Australia  565	20. Switzerland  197



The newly refurbished UCD Student Desk, which allows staff to connect directly with students, where straightforward questions can be resolved quickly and more in depth questions can be discussed in comfort and privacy.



**Professor
Mark Rogers
Registrar and
Deputy President**

Introduction by the UCD Registrar and Deputy President

At the heart of a UCD education is the delivery of a holistic educational experience which recognises and nurtures the unique individual talents of each student. We are proud to offer an inclusive and progressive learning environment in which students can advance academically and flourish individually. 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, the benefits of which are far reaching and advance the entire university community. These attributes single UCD out as a leader in the delivery of a world-class student and research focused education.

The launch of the UCD Strategy 2015-2020 provides the roadmap for building on our impressive reputation in education. This year has seen extensive planning in preparation for a comprehensive review and redesign of our curriculum informed by our vision for 2020, and by best international practice in curriculum design, pedagogy and effective student learning. By maximising the full potential of an outcomes-driven modular degree structure we ensure we can leverage intellectual, cultural, social and sporting opportunities for the benefit of our students.

Notwithstanding the work underway, UCD continues to be the *University of Choice* with 8,889 CAO first preferences and the *University of First Destination* for international students seeking to study in Ireland. We continue to increase the enrolment to our graduate

taught programmes and show a small increase in research students after several years of decline. Diversity is a core value of the University within our Strategy. Over 1,000 students have now graduated with a UCD degree having entered the University through alternative pathways. A socially and culturally informed education is one of the many benefits our students are fortunate to experience by studying at UCD. During their time here, they gain the necessary skills to actively engage with and contribute to an enhanced global society. We continue to grow the social diversity of our students, increasing the proportion of students from under-represented groups and increasing the diversity of our international student population. UCD is now home to 6,600 international students with a further 5,600 studying overseas. Our international students make a valuable and vibrant contribution to our university life as well as spreading UCD alumni globally by remaining lifelong ambassadors for their *alma mater*.

As we implement our new strategic plan, I am confident we will produce a student centred educational experience second to none and produce administrative efficiencies which allow us to continue to deliver a world-class education experience for both Irish and increasing numbers of international students. In this section of the Report, you will read how Academic Affairs are actively working to embed these objectives into the curriculum of our students.

Professor Mark Rogers
Registrar and Deputy President

Strengthening and Enhancing Academic Disciplines and Programmes

Improving the Educational Experience

An enhanced student learning experience is achieved by investing in professional development courses in higher education teaching and learning for those who deliver our programmes, and who support student learning. 2014/15 saw 34 faculty participate in accredited programmes in University Teaching and Learning. Greater emphasis is now placed on supporting early career academics through the provision of customised courses and seminars to tutors, PhD students and post-doctoral researchers. Of particular note, 2014/15 saw the launch of a new seminar series for post-doctoral researchers on university teaching and learning which was attended by 22 staff. In response to the growing imperative to embrace new technologies in higher education teaching and learning, IT Services, Teaching and Learning, and UCD's community of school-based educational technologists joined forces to deliver the inaugural *EdTEC*x talks in March 2015. Over 200 faculty and staff participated in this two day event, drawing inspiration and new ideas from colleagues and experts on effective use of technology in the classroom. UCD continues to encourage and facilitate academic development through shared practice, with over 140 joining the new Teaching and Learning Google Plus online community. Launched in 2014, it provides a space for sharing ideas and discussions on teaching- and learning-related issues.

A crucial element underpinning the development of teaching and learning at UCD, over the past number of years, has been the consistent use of robust research and scientific-based pedagogic enquiry upon which to create and support evidence-based approaches to learning. The research findings of the current Fellows in Teaching and Academic Development, which is concerned with the impact and development of research/teaching linkages in the delivery of high quality student learning, will inform the University-wide curriculum review and enhancement process scheduled for 2015/16. A new online resource on research into teaching, produced by UCD Teaching and Learning, provides practical guidance to staff who are interested in researching their teaching practice, with a view to sharing it through publication and/or conference paper.

Nationally, UCD continues to build its reputation for excellence in the scholarship of teaching and learning, securing through a competitive process two of seven research grants offered by the National Forum for the Enhancement of Teaching and Learning. Dr Niamh Moore-Cherry and Professor Suzanne Quin received €25,000 for a study entitled *Student Non-completion: Why do students leave higher education in Ireland?* A team of researchers led by Drs Sara O'Sullivan, Suzanne Guerin, Amanda Gibney and Michael Staunton received €25,000 for a project entitled *Existing Research Outputs focused on Higher Education Teaching and Learning in Ireland*.

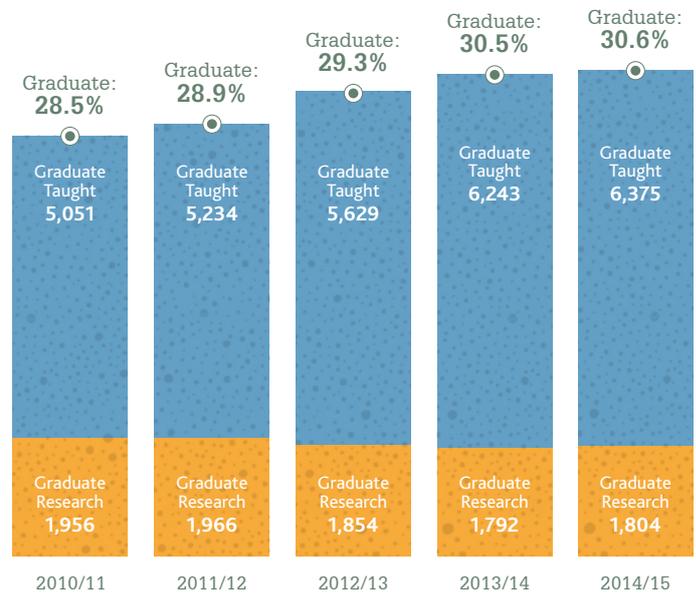
Dr Kevin Costello, UCD School of Law, and Ms Sinead Sheerin, UCD School of Veterinary Medicine, were among 53 Teaching Heroes from 27 higher education institutions throughout Ireland who were recognised by the National Forum for the Enhancement of Teaching and Learning in Higher Education, at the National Teaching Hero Awards ceremony in September 2014.

Growing and Developing Graduate Education

In response to the continued expansion of UCD's taught graduate portfolio, UCD Teaching and Learning undertook a strategic project in 2014/15 to support those involved in graduate programme planning, design and implementation. In keeping with the University's commitment

to extending its reach internationally, particular attention was paid to developing teaching and learning supports suitable for both domestic and international students, as well as leveraging technology to facilitate flexible online and blended programme delivery.

Figure 1: UCD Graduate numbers (Ireland campuses)



Programme Development

UCD continues to expand the diversity of its taught graduate portfolio to a level where we now offer over 550 programmes. Overall, graduate enrolment (research and taught) saw a year-on-year increase of approximately 2%, against a backdrop of a 19% increase in enrolments in the past five years. Notably, there has been a 33% increase in the number of graduate taught enrolments in the past five years. In 2014/15, 21% of graduate research and 18% of graduate taught students came from outside the EU, which reflects our image as Ireland's Global University.

To promote UCD as a community of scholars, the Dean of Graduate Studies held the inaugural *GradsConnect* event in September 2014, which welcomed and showcased the facilities and supports available to enhance the academic experience and university life of graduate students.

PhD Support

The number of transferable skills workshops almost doubled over the course of the 2014/15 academic year. These workshops offer doctoral students from every discipline the opportunity to enhance a variety of skills including project management and presentation skills. Students also gain knowledge on how to progress through UCD's structured PhD programmes and fine tune their personal profiles for career development. Experts presenting are primarily sourced from within UCD, with the addition of a yearly visit by a leading world expert in supporting doctoral students with their writing skills.

UCD was significantly involved in the development of The National Framework for Doctoral Education, which was launched in June 2014. This Framework sets out the best practices in structured PhD programmes within Irish higher education institutions.

Research Supervisor Development

January 2015 saw the launch of the joint *UCD-TCD Research Supervisor Support and Development Programme* (RSSDP). This is the first of its kind in Europe, where two universities successfully collaborated on the provision of supervisor supports. It took the form of monthly

workshops in either Trinity College Dublin or UCD. Participants were provided with guest expert presentations together with two masterclasses, delivered by three international experts in the fields of supervisory practice, doctoral development and the pedagogy of supervision. Positive feedback was received, with one participant remarking that the programme was "crucial to academic life on campus". Supervisors welcomed university support in navigating through the complexity of professional relationship development and practices in doctoral supervision. The collaboration and sharing of experiences with TCD staff was also welcomed, and UCD supervisors requested that collaborations be developed with other higher education institutions. The event was so successful that participants requested the development of further supports and repeat participation at next year's programme.

UCD in conjunction with Universitas 21 (U21) hosted an *International Workshop on Research Supervisor Support and Development - Practices, Principles and Priorities*, in Shanghai Jiao Tong University, in March. This workshop was attended by the Deans and Directors of Graduate Education of a number of U21 partner institutions, and UCD was among eight institutions to present position papers on supervisory activities. The keynote presentations included: *the European Perspective on Good Practices in Supervision; Re-engineering the Higher Degree Research Supervision Paradigm- Challenges for the Future; Professions-based Doctorate Supervision; and Industrial-based Doctorate Supervision.*

Delivering and Measuring Quality

Our reputation hinges on the quality of our educational experience and scholarship. We must be able to demonstrate that we have the quality we claim and the willingness and drive to improve and enhance our activities continuously.

Our quality assurance activities serve these twin purposes. Taken together, they create trust in the higher education institution's performance. A successfully implemented quality assurance system gives confidence to the higher education institution and the public on the quality of the institution's activities, while also providing advice and recommendations on how to further enhance its offerings. These two elements support the development of a quality culture which is embraced by students, staff and management.

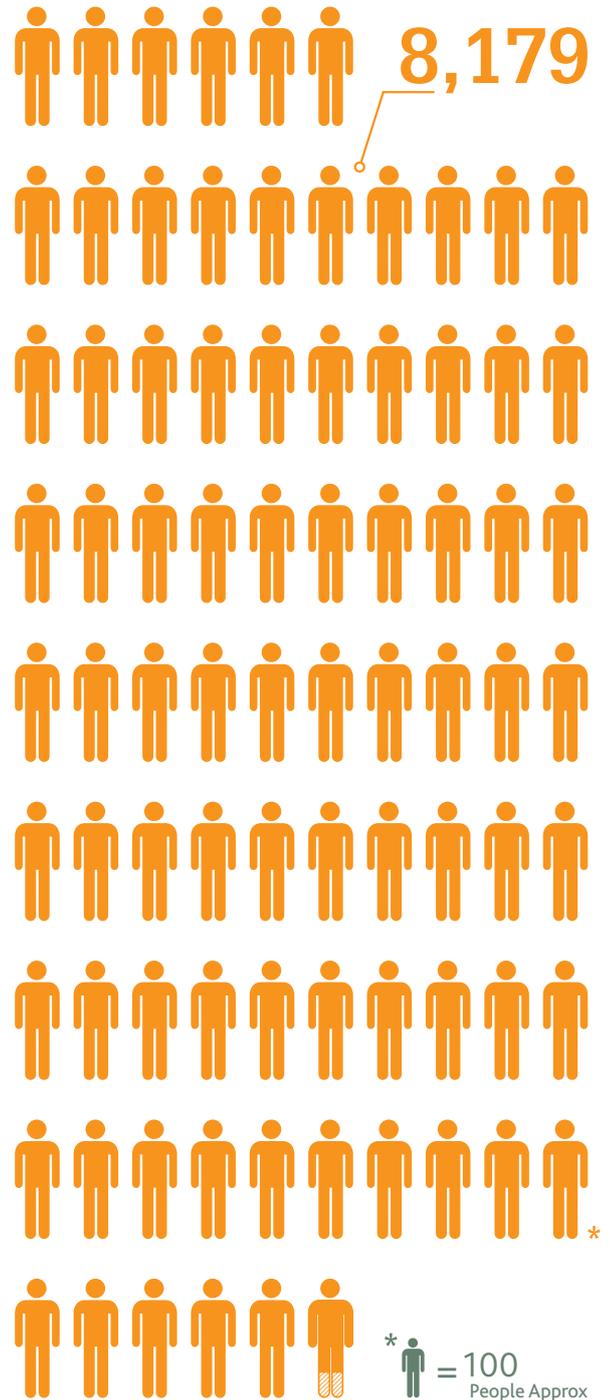
In accord with the Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG) 2015, UCD uses a range of formal and informal quality assurance and enhancement mechanisms, including: module and programme design, approval and monitoring; curriculum review; student feedback and representation; external examiners; external professional/regulatory body accreditation and/or recognition; and external institutional quality review. The UCD quality framework and the processes it encompasses, both informal and formal, are appropriate and proportionate vehicles to support reflection and enhancement, and capture and disseminate excellent practice.

Within this broad UCD quality framework, periodic unit review still remains one of the key mechanisms to evaluate the quality of UCD's educational provision and to identify enhancement opportunities. It provides a formal mechanism for faculty and staff to reflect upon and seek to improve practice in all areas of their work and to advance learning, teaching and research in their disciplines, all of which leads to an enhanced student learning experience.

2014/15 saw quality reviews completed for the following units: UCD School of Veterinary Medicine; UCD School of Mechanical and Materials Engineering; UCD School of History and Archives; UCD School of Philosophy; UCD School of Mathematical Sciences; UCD IT Services; and UCD Library.

The UCD quality review of units is carried out by review groups, which include UCD staff and senior subject specialists drawn from the top ranked 1% of global higher

Total Number of UCD Graduate Students in Ireland



Overall increase in Graduate student numbers =

↑ 19%

in the past 5 years

education institutions. In 2014/15, this included reviewers from University of Oxford, University of Cambridge, Cornell University, and the University of Leuven. In order to facilitate an independent evaluation of a unit under review, UCD policy is that the number of internal reviewers will not exceed the number of external reviewers in any quality review group. In 2014/15, international reviewers were drawn from seven countries: Australia, Belgium, France, the Netherlands, Sweden, the United Kingdom, and USA.

Peer review facilitates senior faculty and staff from other world-class institutions to play a role in ensuring that the quality of UCD's academic and support provision is not only maintained but is continually enhanced. This approach to quality review is aligned with the UCD Strategic Plan 2015-2020, which includes the objectives "to provide an educational experience that defines international best practice" and to "consolidate and strengthen our disciplines". 2014/15 saw the completion of UCD's second seven year cycle of quality reviews, totalling 70 separate unit reviews including schools and support units.

We recognise there is no room for complacency. We will continue to reflect on our performance and seek additional ways to further enhance provision. As an example, a pilot quality research assessment is being undertaken with the UCD School of Archaeology, in conjunction with the UCD Quality Office and UCD Research.

Identifying and sharing good practice are integral to the quality enhancement process within UCD, and these are facilitated in a number of ways. For example external references, such as the Quality and Qualifications Ireland (QQI) *Code of Practice for the delivery of educational provision to international learners* and the ESG (2015), are used to map UCD's practice and provision against. Good practice is also identified through the periodic quality review of units, which is collated and shared via an annual digest to schools, support units and UCD's collaborative partners.

Consistent with the UCD Strategy 2015-2020, to "build our engagement locally, nationally and internationally", UCD staff continue to play an active role in national and international higher education quality events including, for example: Chairing the Irish Universities Association Quality Committee 2014/15; speaking at the annual national quality enhancement

seminar organised by Quality and Qualifications Ireland in May 2015; and co-organising the annual Irish Higher Education Quality Network Training Workshop Series. The UCD Director of Quality has been selected by the higher education Quality Assurance Agency (Scotland) as an International Reviewer for the institutional review of Scottish universities.

Student Learning, Engagement and Development

UCD Ad Astra Academy

The *Ad Astra Academy* is an initiative arising from UCD's strategic plan, which 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.

2014/15 saw the fourth 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, 85 new scholarships were awarded: 58 Academic, 22 Elite Athletes and 5 in the Performing Arts. Mentoring is a cornerstone of the scholarship programme, with approximately 40 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, established the scholars council 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, including the London 2012 Olympics and the British and Irish Lions Rugby Tour. To date, five elite athletes have qualified for the Rio 2016 Olympics, and five more may qualify for Rio over the next few months.

SPARC

To make UCD a better place to live, work and learn a pilot initiative, SPARC, was established to facilitate the delivery of a series of projects through staff/student partnerships. Following a competitive selection



UCD Student Services and UCD Students' Union collaborated on a project to compile an archive capturing the rich history of the SU. Pictured (l-r) at the launch are: UCD President, Professor Andrew Deeks; UCD SU President, Feargal Hynes; and UCD Governing Authority Chair, Eugene McCague.



The 93 new UCD Ad Astra Scholars 2014/15, pictured with (front centre, l-r): Mr Tony Carey, Performing Arts Strand Director; Professor Colin Boreham, Elite Athlete Strand Director; UCD President, Professor Andrew Deeks; Professor Mark Rogers, UCD Academy Director, Deputy President and Registrar; and Professor Liam Kennedy, Academic Scholars Strand Director. These Scholars joined the 150 continuing students to form UCD's premier programme, which recognises and nurtures exceptional students.



process, four projects were approved for funding in 2014/15. The successful projects reflected a diversity of inventive ideas including: the establishment of an apiary of honey bee colonies in Belfield; creation of a high-spec virtual tour of a Conway Institute Laboratory; Maths Sparks hands-on workshops for DEIS schools; and an educational programme to engage school children with archaeology in the Dublin area.

Career Support

The University continued to develop our graduates' attributes and employability skills, enabling them to become effective global citizens. This was achieved through initiatives led by the UCD Career Development Centre, including the UCD Big Skills Challenge (early stage support for first year students), and Career Development Mentoring. The University also recognises development of six core work competencies for students using a City and Guilds Professional Recognition Award.

The UCD Career Development Centre operates both centrally and locally, and delivered 185 tailored workshops in UCD Schools over the year. Non-credit bearing certificates, recognising professional development through co-curricular programmes such as Skills for Working Life, were awarded to 128 students. The Centre connects national and international employers to UCD talent. This year 2,359 vacancies were listed on our vacancy database. An additional 278 recruiters with multiple vacancies recruited at UCD directly, attracting 5,516 students. Encouraging students to develop and articulate their aspirations, career plans and skills is critical to success and, to enable this, 2,160 career coaching and guidance interventions were delivered.

Internationalising the Student Experience

International student numbers expanded to approximately 6,600, taking the proportion of international students on our Irish campuses to 25%. The increase is due to the continued growth in the US Study Abroad programme, which topped 1,000 students for the first time. This growth

was supported by the development of innovative new programmes in subject areas that have not traditionally engaged in Study Abroad, such as engineering and nursing. UCD built on its successful engagement with the Brazilian Science without Borders programme, attracting nearly 120 students, the largest number of new enrolments in the Irish sector for the 2015 cohort.

UCD's global footprint was further increased by the enrolment of over 5,600 students on its overseas programmes and the launch of a network of Global Centres in the USA, China, India and South-East Asia. This builds on existing operations in New York and Beijing, with UCD now established in Chicago, San Francisco, New Delhi and Kuala Lumpur. The Global Centres support the development of institutional partnerships, admission and enrolment of international students, and the engagement of UCD alumni.

New international partnerships and collaborative programmes were established with Nankai and Tianjin universities and Harbin Institute of Technology in China, Nanyang Technological University in Singapore, the University of Buenos Aires, and Tblisi State University. UCD welcomed the first cohorts of students from collaborative programmes with Beijing Dublin International College.

Outgoing student exchange programmes expanded to facilitate 615 students with UCD sending students for the first time to Argentina, Uruguay, and to new U21 partner, the University of Maryland. Student and staff mobility will be supported over the coming years with funds secured from the Erasmus+ Credit Mobility Programme. UCD was Ireland's most successful institution in the first round of applications for this new funding programme, with nine successful bids covering six continents.

Student Engagement

Through the celebration of significant international events, the UCD Global Lounge continues to support and enhance our students' awareness and celebration of global cultures and activities. To further enhance the

student experience, UCD now offers a series of language cafes in Chinese, French, German and Spanish. On the international sporting front, UCD sent a female Gaelic football team to the GAA Asian Gaelic Games in Malaysia. The team which was made up of international students from Africa, Asia, Europe and North America, including a number of beginners, underwent a rigorous training and selection process and was successful in advancing to the semi-finals.

In 2014/15, UCD Volunteers Overseas (UCDVO) engaged 143 volunteers in its annual volunteer and development education programme. Placements continued in India, Haiti, Nicaragua, Tanzania and Uganda, with students raising over €350,000 to fund development projects in the areas of healthcare, education, technology and infrastructural development. A number of new initiatives took place, including the inaugural conference on International Volunteering in Higher Education; the launch of a series of evening courses on development education and activism; and the extension of computer education programmes in Haiti to include the set-up of solar powered computer labs for isolated rural communities. UCDVO has also been successful in securing external funding from Irish Aid, Concern Worldwide and Trócaire for its development education activities on campus.

Widening Participation and Supporting Lifelong Learning

UCD prides itself on being an inclusive university and this is reflected in the sustained increase in the participation rate of under-represented students. This priority is reflected in Objective 5 of the new UCD Strategic Plan 2015-2020. Realising this objective is key to expanding the transformative power of education to a wider student base. UCD continued to make a concerted effort to target under-represented student groups, including school leavers from low socio-economic backgrounds, mature students, students with a disability, part-time and occasional learners, members of the travelling community and refugees.

UCD, through UCD Access and Lifelong Learning, in conjunction with the Dublin Region Higher Education Alliance, organised the Dublin Region Adult Education Fair, which was launched in November by Tánaiste Joan Burton, TD. This event brought together higher education institutions from across the region under one roof to provide guidance, support and networking opportunities for potential mature students.

UCD works in partnership with a number of cultural institutions in Dublin, including the National Library of Ireland (NLI), the Dublin City Gallery, the Hugh Lane, and the Dublin City Libraries. These partnerships expand our lifelong learning opportunities, showcase our scholarship

and celebrate our cultural dimension with a broader audience. The partnership programmes are a tangible expression of UCD's commitment to engagement, offering students access to lifelong learning. This year the Cultural Partnership programme in the NLI reached a milestone of 1,000 learners.

UCD continued with its targeted outreach activities which have proven increasingly successful in attracting and bolstering the number of under-represented students. Developing relationships with schools, communities and business have helped attract prospective under-represented students and have also been beneficial in the personal and professional development of our current students. Second level students in partner DEIS schools are introduced to UCD through residential summer camps, shadowing day and taster sessions. Other initiatives include the OneWeek@Google programme which offers transition year students in linked schools a work experience opportunity, which was extended to UCD linked schools for the first time in 2015.

Supporting mature and adult learners to return to education is central to achieving UCD's access objectives, and promotes the wider benefits of learning to communities and families. Access courses provide an established and well supported pathway for mature students to return to education, with over 100 adults using this route annually in the key areas of arts/social science/law, science/engineering and agriculture. The UCD Open Learning programme has expanded from two modules to 60 modules and it is opening up *UCD Horizons* modules to adult learners in a range of subjects from ten different UCD Schools. UCD's Lifelong Learning programme continues to offer part-time courses in a range of subjects in Belfield, Blackrock and various cultural institutions. 2015 saw UCD reach a significant milestone: since 1997, over 1,000 students who entered the University through the UCD Access and Lifelong Learning supported pathways have graduated with a UCD degree.

The Citi Foundation-sponsored UCD Future You programme, which links current UCD students with fifth and sixth year pupils to provide advice and mentoring, was recognised with an Excellence in Community award at the Chambers Ireland Corporate Social Responsibility Awards 2014.

UCD has a clear objective of providing an accessible campus for all students, staff and visitors and to promote best practice in universal design for new projects. UCD Access and Lifelong Learning works with key UCD units to progress the recommendations of the UCD Accessibility Audit. Notable completed accessibility works in 2014/15 included modifications to escape routes at ten priority buildings, which receive the highest level of footfall, and the purchase of a portable hearing loop system which can be used across campus.



Pictured visiting the Sangam Vihar Education Centre in Delhi are: Professor Mark Rogers, UCD Registrar and Deputy President, and Mr Alex Metcalfe, UCD Director of International Affairs, with Dr Sunita Kaistha and Ms Amita Sahaya, who are representatives of Women, Work and Health. The centre was built by volunteers from UCDVO and Delhi University, with funds from Irish Aid.

	2013	2014
Socio-economically disadvantaged students (full-time degree only) (1)	1,717	1,746
Students reporting a Disability (full-time) (2)	1,311	1,349
Students reporting a Disability (part-time)	23	48
Mature students (full-time) (3)	997	967
Mature students (part-time)	777	814
Part-time and flexible learning (4)	827	1,006
All UCD Widening Participation Students	4,375	4,437
TOTAL UCD undergraduate students	16,301	16,310
% Widening Participation Students	26.8%	27.2%
New Entrants to Undergraduate Degrees - supplementary admission routes	2013	2014
HEAR	255	234
DARE	196	153
FETAC	69	72
Mature	248	233

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

(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

Advocating for diversity and widening participation underpins the successful realisation of access objectives. UCD successfully secured sponsorship from the National Learning Forum for the *Challenging Assumptions* seminar, which was held in UCD in May 2015. This seminar delivered strategies and awareness on supporting under-represented students for faculty, staff and graduate students. The University was again successful in securing HEA Springboard+ funding, with graduate courses in innovation and computer science enrolling this year. UCD

continued to build on its national and international access presence with an invitation to host the 2016 European Access Network Silver Jubilee Conference. Through the Widening Participation Committee, there have been improvements in the methodology and definitions for measuring progress and participation rates of Widening Participation students in UCD. This will allow UCD to fully measure progress against national targets. The data presented in this Report reflects the new methodology and definitions (see Table 1).

UCD Fashion Show.



At its core, UCD's Access and Lifelong Learning has been offering specialist supports for students to facilitate them in accessing, succeeding and progressing through their courses. Promoting awareness and providing training for staff has been enabled by the expansion of disability awareness, campus accessibility and universal design workshops for staff across the University. Colleagues across Access and Lifelong Learning offer specialised support for students at both pre-entry and transition, in order to complement the generic study skills and supports available across the programme areas. Access and Lifelong Learning has continued to develop a scholarship scheme with support from UCD Foundation. Scholarships are a key mechanism to attract students from disadvantaged backgrounds to UCD, and to ensure their successful participation throughout their degree programme. Thirty five Access and Lifelong Learning Scholarships were awarded in November 2014.

Delivering Library, Information and Knowledge Management Services

UCD Library

2015 saw a productive programme of work for the UCD Library, with the completion of the work programme of the University Strategic Plan 2010-2014, the quality review process (QA/QI), and the commencement of work on the next cycle of strategic planning, while continuing to introduce new and enhanced services to our users.

The quality review process (QA/QI) coincided with the final year of the 2010-2014 strategic plan, enabling a simultaneous assessment of the Library's overall service quality and its success in achieving the objectives of its strategic plan. With regard to the latter, 97% of actions specified in the strategic plan were either completed (67%) or in progress (30%) by the end of 2014. Extensive work was undertaken to produce the Self-Assessment Report on quality.

The Quality Review Report recommended improving Library facilities, particularly within the James Joyce Library, and called for major refurbishment of the facility, as well as specific, high impact topical refurbishments in the near-term. Wishing to have these improvements in place before the start of the new semester, work took place over

the summer months, including the creation of a space for the UCD Writing Centre, together with a vital specialised storage area for Special Collections. The Report also recommended the commencement of a robust Library collection development programme (underway during the summer months). This will rationalise collections in general and relocate rare materials to Special Collections, in addition to identifying low-use items for storage and purging deprecated teaching materials.

The Library has increased seating in the James Joyce Library's 'Hub' area, and provided 23% more seating in the Veterinary Library.

The number of self-service options available to students has been extended, including the rollout of self-checkout laptop computer loans at James Joyce Library, the introduction of online booking for single study rooms and the Postgraduate Research Centre, and improving visibility of online self-service tools through a consolidated Library webpage available via UCD Connect.

A full academic liaison service was delivered, together with a busy Library teaching, learning and researcher support programme through the year. Library staff development and business processes were further enhanced: by migrating the Library Management System to a new platform; implementing a new system of inter-unit collaboration for Library Assistants, to provide enhanced work experience for staff while increasing operational agility and efficiency; and hosting an annual Library Staff Day for networking and development.

Various new public online services were made available. The Libguides platform was upgraded and the range of support materials was increased and diversified. To orient new students in the effective use of Library services an interactive virtual tour was added to the Library's orientation programme.

UCD Digital Library was awarded the Data Seal of Approval, becoming Ireland's first Trusted Digital Repository. Our digital services reached significant new milestones with the Open Access Research Repository reaching one million downloads of UCD authored papers. Significant new digital collections were added, including materials from the Irish Architectural Archive, and the Dublin Diocesan Archive.

UCD Library staff pictured (l-r) at the official launch of the digitised Gleeson papers, a collaboration between the Archdiocese of Dublin and UCD Digital Library are: Dr John Howard, UCD Librarian; Julia Barrett, Head of Research Services; Dani Montes, Library Assistant Research Services; Audrey Drohan, Senior Library Assistant Research Services; Orna Roche, Assistant Librarian Research Services.



The development of the University's cultural heritage, supported by UCD Library, continued this year with new resource acquisitions, exhibitions and projects. Additional rare publications of W.B. Yeats were donated by UCD alumnus Joseph Hassett and by Dr Mark Rake. Both donors participated in a symposium co-sponsored by the Library and UCD School of English, Drama and Film. Exhibitions this year included: *Acts and Arms: the Road to Woodenbridge*, curated by Dr Conor Mulvagh and Colm O'Flaherty; and *Thomas MacDonagh and the Irish Review*, curated by Catherine Wilsdon and Giulia Bruna. UCD Library spearheaded a number of new projects including the inauguration of the UCD Authors Collection. This is an initiative to acquire copies of significant monograph publications by UCD authors, which will be held in the Library's Special Collections. The Library also took initial steps to establish the Irish Poetry Reading Archive, which collected readings and manuscripts from 29 contemporary Irish poets during the past year.

UCD IT Services

UCD IT Services continued to ensure that they were at the forefront in the provision of progressive technological developments for the University. In June 2015, UCD moved to the new cloud web hosting environment with Amazon Web Services. This new hosting service benefits from increased resiliency and performance.

In order to further enhance IT services, UCD Connect transitioned to a different style of service, which provides links to essential services such as Mail, Blackboard, Library, etc., in addition to partner websites. The new style, mobile friendly Connect, with its brighter and more lightweight look, has been well received.

Responding to user feedback and input, the new mobile friendly IT Services website was published in August. The new site, which is categorised into the main support service areas, aims to be customer focused, allowing staff, students and visitors easy access to IT support information.

A new Integrated Recruitment System was deployed to assist recruiters who work in international student recruitment. The system manages prospective student enquiries, tracks leads and records interaction. It integrates seamlessly with the UCD Application System to provide an end-to-end view of the conversion of enquiries through to registered students on our programmes.

In June 2015, IT Services and UCD Registry delivered a set of enhancements to UniShare, which is UCD's CRM tool for managing interaction with

students, prospective students and staff. Launched in 2012/13, its use has been growing steadily as additional business areas come on board. This latest set of enhancements enables UniShare users to refer a student's query to a team or individual. The changes provide for a more streamlined and efficient process in handling student queries, and they have been welcomed by UniShare users.

During early August 2015, Research IT upgraded the login, storage and infrastructure nodes on our in-house Sonic High Performance Computing cluster. This service now runs on faster equipment with enhanced backup and disaster recovery capabilities.

Delivering Excellence in the Student Experience

The wellbeing of our student population has always been to the forefront of UCD's priorities. 2014/15 saw the introduction of the new Student Mental Health and Wellbeing Policy, which seeks to promote mental health and wellbeing as part of the UCD Student Experience. Endorsed by the University Management Team, the policy was developed to safeguard the mental health and wellbeing of our student body, who are often faced with many competing pressures, from financial concerns to managing heavy workloads.

In tandem with this, UCD established a Health Promoting University Group, as part of the Healthy Ireland Initiative, which is a national framework to improve the health and wellbeing of the people of Ireland. Our aim is to create an environment on campus which will enhance the wellbeing of our students, faculty, staff and local community in the years to come. Preparations were made for a new Smoke-Free Campus policy to start in September 2015, with a ban on smoking within 10 metres of all entrances to buildings.

UCD continued its endeavours to support and enhance integrated student services for the benefit of our students. 2015 saw a number of new developments, for example in the area of student analytics, with an increased focus on student performance, retention and engagement. This year, we expanded our range of information for students, offering videos and online guides with tips on exam preparation and registration.

The transition to college can be daunting for new students and, in order to ensure a smooth transition, we have introduced a number of enhancements to our start-of-year processes, in terms of fee payments and email protocol. Developing a content strategy to engage with our student audience through social media was also a major focus this year, with increased use of new technologies and social media platforms to communicate with students.

In line with UCD's commitment to develop and enhance its facilities as part of the an overall campus development plan, the Student Desk area in the Tierney building was completely redesigned over the summer months to create a bright, modern and



Ryan Swan, UCD, scores his side's first goal past Slovan Bratislava goalkeeper, Jan Mucha, UEFA Europa League, Second Qualifying Round, Second Leg, UCD Bowl.



UCD Symphony Orchestra, UCD's flagship instrumental group with a membership in excess of 80, directed by Dr Ciarán Crilly, UCD School of Music, travelled to perform in Uppsala University, Sweden, in March.

welcoming space for students and staff. The approach and service which will be provided to students was also revised to meet best international practice. In addition, a newly renovated Welcome Centre opened its doors in September 2014, in the John Hume Institute for Global Irish Studies. This offers campus tours for prospective national and international students, all year round.

Student Societies

2015 was a prodigious year for UCD Societies, with a new membership record of over 48,000 students across all societies. Thirteen societies recorded in excess of 1,000 members, with the L&H also setting a new record of over 6,000 members.

Among the guests welcomed to UCD this year were: academics Richard Swinburne and Norman Finkelstein; holocaust survivor Tomi Reichenthal; screenwriter and Academy Award Winner Dustin Lance Black; author Neil Gaiman; Central Bank Governor Patrick Honohan; former Tánaiste Des O'Malley; and journalists David McWilliams, Dave Fanning and the late Bill O'Herlihy, to name but a few.

The UCD Debating Society saw many strong national and international performances, and included individual success in the *Irish Times* debating competition for Eoin MacLachlan. Both Law and L&H societies reached the semi-finals of the European Universities Championships, with the Law Society team reaching the final where they lost on a 4-3 adjudication.

It was a particularly successful year for our performance societies. UCD Dramsoc were nominated in nine out of 13 categories at the Irish Student Drama Awards. They won seven awards, including the coveted 'Best Director' and 'Best Overall Production'. Dramsoc also continued with their now annual Leaving Certificate production: this year, *Othello* welcomed hundreds of school goers to the campus over the Christmas break. UCD Dance society took two of the four titles on offer at the Irish Universities Dance Championships, with a second and third place in the other two categories. Dance also took the title of Best Mixed Performance. UCD Musical Society challenged strongly for recognition at the AIMS Awards, taking the title for Best Stage Management for their production of *Bonnie and Clyde*.

Student Clubs

In the sporting realm, UCD athletes continue to bring pride to the University, and we are fortunate to have many talented athletes studying here. In July, athletes Mark English and Karl Griffin reached the final of the 800m at the European Athletics Under-23 Championships, in Zurich. Mark

secured his place at the 2016 Rio Olympics. Sarah Lavin also competed at the Championships in the 100m hurdles. At the Morton Games, Ciara Mageean won the Target McConnell's Women's international Mile event and Karl Griffin won the 800m event.

The UCD Ladies Boat Club won both the Intermediate and Senior Eights Championship at the Irish Rowing Championships. UCD students David O'Malley, Andrew Griffin and Shane Mulvaney represented Ireland at the World Under-23 Rowing Championships, in Bulgaria in July.

UCD Soccer continues to challenge for the automatic promotion place to the Premier Division of the National League. They played a friendly game against a Liverpool XI in July, and played in two rounds of the Europa League: in the first round the team beat F91 Dudelange of Luxembourg, but lost to SK Slovan Bratislava in the second round.

Ten UCD players were named on the Ireland Under-20 side for the Rugby World Cup in Italy. The players are Ross Byrne, Joey Carbery, Billy Dardis, Jack Dwan, Jeremy Loughman, Nick McCarthy (captain), Sean McNulty, Josh Murphy, Andrew Porter and Garry Ringrose. UCD players Harry McNulty and Adam Byrne were members of the Ireland Sevens team which finished in third place at the European Repechage, in Lisbon. The team is now one step away from Olympic qualification.

Alex Gleeson won the prestigious Boyd Quaich International Golf intervarsity event at St. Andrews, Scotland, in July. His fellow UCD club mate Jonathan Yates finished in second place. Following a very successful year, Alex was named on the Ireland team for the home internationals.

Fourteen UCD students were selected to represent Ireland at the World University Games in Gwangju, South Korea, in July. Chloe Mustaki, Catherine Cronin, Ciara Grant, Dora Gorman, Julie-Ann Russell, Orlagh Nolan, Siobhan Killeen and Niamh Walsh were selected for the women's football team, while Alan McGreal was selected in the men's football squad. Athlete Ciara Everard was selected for the 800m and, continuing his winning form, Alex Gleeson was selected for the men's golf team. Completing the UCD representatives were swimmers Alex Murphy, Shani Stallard and Shauna O'Brien.

UCD's Alex Murphy represented Ireland at the World Swimming Championships in the 50m breaststroke event, in Russia in July. Darragh McDonald won a bronze medal in the 400m Freestyle event at the IPC Swimming World Championships, in Glasgow.



8,914
Total employment (FTE) generated by UCD.

€1.3bn
Annual economic output generated by UCD and its students in Ireland.

Pictured (l-r) at the launch of Delivering Impact - The Economic, Social and Cultural Impact of University College Dublin are: Andrew Byrne, a final year UCD Commerce student and auditor of the University College Dublin Volunteers Overseas Student Society; An Taoiseach Enda Kenny TD; and Professor Madeleine Lowery, biomedical engineer, UCD School of Electrical, Electronic and Communications Engineering.



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

Introduction by 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.

Excellence in research and innovation is a defining characteristic of UCD, and is central to the UCD Strategy 2015-2020. This excellence arises from the range and depth of our disciplines, the expertise and commitment of our community, and the strength of our partnerships. It allows us to deliver impact to a dynamic economy, an informed society and a vibrant culture.

A number of our researchers achieved important recognition during the past year for their excellence in research and innovation: a paper by Professor Des Higgins was named as one of the top 10 most highly cited publications of all time, in a 2014 *Nature* article; Professor Barry Smyth was named as Science Foundation Ireland (SFI) Researcher of the Year 2014; and Professor Cormac Taylor won a *Nature* award for his mentorship of early-stage researchers.

Our research and innovation landscape is a highly interconnected one, with connections both internal and external. Under the UCD Strategy 2015-2020, we will continue to conduct interdisciplinary research in important areas of national and global need, steered through a number of cross-cutting programmes and research centres.

This year saw success for major UCD-led centres such as iCrag, in applied geosciences, and ARCH, in connected health. Our researchers are also working together to deliver an ambitious and diverse programme of events around the Decade of Centenaries.

UCD has an outstanding record of leadership in innovation and entrepreneurship. The University won two of the four national 2015 Knowledge Transfer Ireland Awards, recognising our achievements in licensing technologies and in supporting successful spin-out companies. The year has once again seen a number of successes by NovaUCD companies, and a further strengthening of the industry presence at NexusUCD. There are now 50 companies which have chosen to locate on our campus in order to interact with our research activity.

The global reach of UCD in innovation and entrepreneurship continues to grow, with international delivery of programmes and visits from leading international figures, including European Union Commissioners Carlos Moedas and Phil Hogan.

As outlined in the UCD Strategy 2015-2020, it is important to capture and convey the broad impact of research, scholarship and innovation, and to spearhead the development of a national articulation of this impact.

During the year, therefore, we carried out the first detailed assessment of the value and impact of UCD's activities

to the Irish economy. I was delighted that An Taoiseach Enda Kenny TD launched the accompanying report, entitled *Delivering Impact: The Economic, Social and Cultural Impact of University College Dublin*. This underlines UCD's key role as a major economic actor and employer in Dublin and in Ireland.

The key findings outlined in this Report indicate that the total economic output generated by UCD and its students in Ireland amounts to €1.3 billion annually, while the total number of jobs generated is 8,914. These economic results are complemented by a series of case studies which demonstrate the substantially broader social and cultural impact of the work we undertake at UCD.

All of this is made possible through the excellence and commitment of UCD faculty, staff and research students, and I wish to register my continuing appreciation for their work.



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 €107.1 million (see Table 1). This was a strong performance once again. Table 2 shows the largest research grants awarded this year.

Highlights included UCD's success in the SFI Research Centres funding call, which resulted in UCD leading the iCRAG Centre and partnering in three other Centres: ADAPT, CONNECT and LERO.

European funding is a particular priority for UCD and the University has had a successful response to the Horizon 2020 Programme. The percentage of UCD's research funding that comes from Europe has grown from less than 5% in 2003/04 to almost 20% in 2014/15, and new structures are in place to support UCD researchers in meeting our ambitious targets for Horizon 2020.

During 2014/15, UCD was awarded three prestigious Europe Research Council (ERC) awards: two consolidators and one starting grant, including our first in law. In addition, an ERC proof of concept grant was also awarded. This brings UCD's total number of ERC awards to 19.

UCD also continued its tradition of success in the European Marie Skłodowska-Curie schemes, leading two Innovative Training Networks (ITNs) and partnering in nine other awards.

As part of our continued engagement with the EU, Carlos Moedas, the European Union Commissioner for Research, Science and Innovation, and Phil Hogan, European Union Commissioner for Agriculture and Rural Development, visited UCD during the year. During their visit senior UCD

	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15
Total value contracts signed incl. contributions to overheads (€ million)	€ 83.1M	€ 95.4M	€ 115.9M	€ 116.8M	€ 49.5M	€ 103.3M	€ 75.7M	€ 113.3M	€ 114.1M	€ 107.1M
Total contributions to overheads (€ million)	€ 11.8M	€ 14.8M	€ 17.3M	€ 21.0M	€ 6.7M	€ 17.0M	€ 9.5M	€ 17.4M	€ 16.5M	€ 17.2M
Total number of contracts awarded	558	452	445	537	449	510	532	614	653	629
Number of proposals submitted	1,245	1,234	1,090	1,150	1,069	1,123	1,263	1,167	1,240	1,605

2014/15 Contracts	Funding Source	Number of Contracts	Value (€ million)
}	Science Foundation Ireland (SFI)	51	€ 42.5M
	European Commission (EC)	40	€ 21.1M
	Enterprise Ireland (EI)	145	€ 6.9M
	Irish Research Council (IRC)	116	€ 5.5M
	Department of Agriculture, Food and the Marine	22	€ 6.5M
	Others	255	€ 24.6M
	Total	629	€ 107.1M

Table 1: Research awards

Leader	Funding Source	Funding Source	Title	€Million
Professor John Walsh	Science Foundation Ireland	Research Centres	Irish Centre for Research in Applied Geosciences (iCRAG)	€15.4M
Professor John Murphy	Science Foundation Ireland	Research Centres	LERO- The Irish Software Research Centre	€4.4M
Professor Martin Steinhoff	Science Foundation Ireland	Investigator Programme	Neuro-immune Communication in Skin Diseases: Cytokines and Chemokines	€3.0M
Professor Dolores O'Riordan	Enterprise Ireland	Technology Centre	Dairy Processing Technology Centre	€2.9M
Professor Walter Kolch	Science Foundation Ireland	Investigator Programme	Overcoming Drug Resistance in Metastatic Malignant Melanoma by Personalizing Treatment	€2.9M
Professor Alistair Nichol	Health Research Board	Clinical Trials Network	Improving Outcomes after Critical Illness	€2.3M
Dr Anding Zhu	Science Foundation Ireland	Research Centres	CONNECT: The Centre for Future Networks & Communications	€2.1M
Professor Madeleine Lowery	European Commission	ES - ERC Consolidator Grant	Multiscale Modelling of the Neuromuscular System for Closed Loop Deep Brain Stimulation (DBSModel)	€2.0M
Professor Lorraine Brennan	European Commission	ES - ERC Consolidator Grant	Metabolomics based biomarkers of dietary intake- new tools for nutrition research (A-DIET)	€2.0M
Peter Kelly	Health Research Board	Clinical Trials Network	The Irish Stroke Clinical Trials Network	€1.8M
Professor Fiona Doohan	Science Foundation Ireland	Investigator Programme	Identifying disease resistance breeding targets in order to enhance the sustainability of cereal production and the security of food supply	€1.8M
Professor Mark O'Malley	Science Foundation Ireland	Strategic Research Cluster	Sustainable Electrical Energy Systems SRC	€1.7M
Dr Suzanne Kingston	European Commission	ES - ERC Starting Grant	The Influence of New Environmental Governance Rules on Environmental Compliance (LEGALARCHITECTURES)	€1.5M
Professor David Brayden	Science Foundation Ireland	Research Centres	Medical devices for buccal delivery of bioactive drugs: an SFI CURAM core project	€1.4M
Dr Alexey Lastovetsky	Science Foundation Ireland	Investigator Programme	Meeting the Future Challenges of Heterogeneous and Extreme scale Parallel Computing	€1.4M
Dr Arturo Gonzalez	European Commission	ES - Marie Skłodowska-Curie Innovative Training Network	Training in Reducing Uncertainty in Structural Safety (TRUSS)	€1.3M
Professor Michael D Gilchrist	European Commission	ES - Marie Skłodowska-Curie Innovative Training Network	Head protection: a European training network for Advanced Designs in Safety (HEADS)	€1.3M
Professor John O'Doherty	Science Foundation Ireland	Investigator Programme - Award	The Macroalgal Fibre Initiative: 'natural molecules naturally'	€1.3M
Professor Mark O'Malley	European Commission	SC - Secure, Clean and Efficient Energy	Realising Value from Electricity Markets with Local Smart Electric Thermal Storage Technology (REALVALUE)	€1.2M
Professor John Walsh	PIPCO RSG Ltd.	Research Project	iCRAG PIPCO Industry	€1.0M
Professor Brian Caulfield	HORIZON 2020	ES - Marie Skłodowska-Curie Innovative Training Network	Connected Health Early Stage Researcher Support System (CHESS)	€1.0M

Table 2: Largest grants awarded to UCD 2014/15

Programme	Volume of Applications	Value of Applications (€)	Volume of Awards	Value of Awards (€)
Career Development Award	49	€569,898	13	€126,609
Dissemination and Outputs	201	€346,897	68	€77,560
Horizon Scanning	80	€984,668	21	€220,081
Incoming and Outgoing Visiting Professors	14	€170,346	9	€75,415
Grand Total	344	€ 2,071,809	111	€ 499,665
College	Volume of Applications	Value of Applications (€)	Volume of Awards	Value of Awards (€)
UCD College of Arts and Celtic Studies	35	€139,761	12	€44,835
UCD College of Agriculture, Food Science and Veterinary Medicine	34	€173,769	13	€50,782
UCD College of Business and Law	16	€132,958	8	€50,360
UCD College of Engineering and Architecture	39	€226,454	9	€21,418
UCD College of Health Sciences	53	€461,028	18	€118,203
UCD College of Human Sciences	58	€333,251	20	€70,427
UCD College of Science	104	€540,618	30	€135,292
Research Institutes & Other Entities	5	€63,970	1	€8,348
Grand Total	344	€2,071,809	111	€499,665

Table 3: UCD Seed Funding Scheme 2014/15

researchers presented the University's strategic plans for research and innovation over the next few years, focusing on agri-food and ICT, and outlined how UCD intends to lead important EU initiatives in these areas.

Six research projects received in excess of €10 million in funding through the SFI Investigator Programme, which supports excellent scientific research with the potential to impact Ireland's economic and societal development.

Building on previous success, Enterprise Ireland awarded almost €3 million to UCD for its work in the Dairy Processing Technology Centre, a new industry-academic collaborative research centre with a research agenda driven by the long-term growth opportunities for the dairy sector created by the removal of milk quotas in 2015.

UCD Seed Funding Scheme

The UCD Seed Funding Scheme is an important internal mechanism for the development of research in UCD. Approximately €0.5 million was disbursed through the scheme over the past year, which accounted for almost 25% of the value of the applications received. Across four different programmes, 111 individual awards were granted (out of 344 applications).

In addition, a special seed funding initiative this year provided funding of €101,280 to 21 projects relating to the Decade of Centenaries. Full details of value, volume of applications and awards by College are shown in Table 3.

Publication Metrics

In 2014, there were 1,966 peer-reviewed journals listed in Elsevier Scopus 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 since 2008.

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 63% more cited than the world average, putting UCD on a similar plane with many leading international research-intensive universities.

During the past five years, 20% of UCD's publications were in the top 10% of the most cited worldwide, and 26% of UCD articles were published in the top 10% of journals (by impact). In addition, more than half of the publications were co-authored with institutions in other countries, emphasising UCD's position as a global university.

Citation impact can also be tracked at the level of disciplines. Tables 5 and 6 show some of the research areas in which UCD exhibits scale and high impact relative to international peers.

Publication Years	Number of Peer-Reviewed Journal Articles in SciVal	Publication Years (5-years)	Field-Weighted Citation Impact
2010	1,873	2006 - 2010	1.59
2011	2,028	2007 - 2011	1.64
2012	1,899	2008 - 2012	1.64
2013	2,020	2009 - 2013	1.61
2014	1,966	2010 - 2014	1.63

Table 4: Publication Metrics and Field-Weighted Citation Impact

Source: Elsevier Scopus/SciVal, accessed 24 July 2015

Rank	Institution	Country	Publications	Citations	Citations per Publication	Field-Weighted Citation Impact
1	University College Dublin	Ireland	592	5,618	9.5	2.25
2	Ghent University	Belgium	679	5,339	7.9	2.25
3	University of Wisconsin	United States	561	4,284	7.6	1.93
4	Katholieke Universiteit Leuven	Belgium	493	3,804	7.7	1.88
5	CSIC	Spain	1,829	15,633	8.5	1.80

Table 5: Food Science Citation Impact*

*For institutions with more than 400 publications, from 2010 to 2014

Rank	Institution	Country	Publications	Citations	Citations per Publication	Field-Weighted Citation Impact
1	University of New England NSW	Australia	478	2,747	5.7	1.80
2	Wageningen University and Research Center	Netherlands	1,348	8,362	6.2	1.79
3	University College Dublin	Ireland	496	3,730	7.5	1.79
4	University of Melbourne	Australia	474	3,226	6.8	1.76
5	Aarhus University	Denmark	964	6,134	6.4	1.72

Table 6: Animal Science and Zoology Citation Impact*

*For institutions with more than 400 publications, from 2010 to 2014

UCD Strategic Research Priority Areas - Key Highlights

In UCD, we seek to deliver excellent research in areas in which the University and country can lead globally, working closely with a range of strategic partners.

In order to do this we have identified six priority themes:

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

1. Agri-Food

The agriculture and food sector is Ireland's largest indigenous industry, employing 170,000 people and contributing €26 billion to the Irish economy.

UCD continues to work with the Agri-Food sector through industry partnership to ensure sustainability and global competitiveness. This relationship is creating safe, novel foods that promote human health. The University also continues to work with State agencies to imagine the *Farm of the Future*, one that protects the environment while optimising food production. Through our expertise in veterinary medicine, UCD is also helping the community to fight disease in livestock and to promote animal welfare.

Agri-Food Highlights

During the year UCD School of Agriculture and Food Science signed two major collaborative research agreements. The first was with Richard Keenan & Co Ltd and the Chinese Academy of Agricultural Sciences, to form the China-Ireland Dairy Science and Technology Centre.

The second was with the University of California, Davis (UC Davis), to further develop education, research, innovation and cultural links between both institutions. Following this signing the UCD Institute of Food and Health held the inaugural John E. Kinsella Memorial Lecture with UC Davis, an annual lecture by an individual whose excellence in the area

of Food and Health is recognised globally. The inaugural lecture was delivered by Dr Catherine Woteki, Chief Scientist and Under Secretary for Research, Education and Economics at the US Department of Agriculture.

UCD, Teagasc and the Agricultural Science Association (ASA) held the *Advances in Knowledge and Technologies for Agriculture* conference in June 2015.

During the year the UCD Institute of Food and Health maintained its success in securing research funding, with annual income exceeding €10 million. This included the award of an ERC Consolidator Grant to Professor Lorraine Brennan, UCD School of Agriculture and Food Science; Professor Brennan is the second ERC recipient in the Institute.

UCD School of Veterinary Medicine also achieved significant successes in attracting research funding during the year: Professor David Brayden, the co-lead PI of the SFI-funded CURAM Centre, along with Professor Grace Mulcahy and Professor Torres Sweeney (with Professor John O'Doherty, UCD School of Agriculture and Food Science) received SFI Investigator Awards.

2. Culture, Economy and Society

UCD is renowned for its work in Arts, Humanities and Social Sciences. Many of UCD's leading scholars have shaped modern Ireland and our place in the world, contributed to public policy debate and formation through their research and scholarship, and helped to interpret our history and culture.

Culture, Economy and Society Highlights

The University has a particularly important role to play in activities around the Decade of Centenaries (1912-1923). Linking in with national and international commemoration initiatives, UCD launched its own programme of activities to commemorate the events of this decade in order to inform national debate and understanding (www.ucd.ie/centenaries).

An Tánaiste and Minister for Social Protection, Joan Burton TD, visited the UCD Geary Institute in September to give an address at the UCD Social Policy Protection Workshop. This is a collaboration between the UCD Geary Institute for Public Policy and the Department for Social

Protection. The workshop included lectures from leading experts in economic and social policy, and was attended by participants from government departments and agencies, non-governmental and voluntary organisations, and early-stage researchers.

During the year the UCD Humanities Institute expanded its international dimension to research on culture, economy and society. The Irish Memory Studies Network is a key strand of the Institute's research infrastructure in this area and guest speakers during this year's seminar series included Dr Kate Kenny (Queen's University Belfast), Professor Ann Rigney (University of Utrecht), and Professor Martijn Meeter (University Amsterdam).

In addition, The Irish Economic Policy Conference 2015 was held in February, with the theme of *Learning from Crisis*. The conference, now an annual event, is jointly organised by the UCD Geary Institute for Public Policy, the Economic and Social Research Institute, and the Universities of Limerick and Stirling.

Professor Teresa Mangum, Director of the Oberman Center for Advanced Studies, University of Iowa, delivered the UCD Humanities Institute distinguished guest lecture, entitled *The Future of Academic and Public Humanities: The Changing Academic Environment in the US*. In addition, the inaugural conference of the *European Network for Short Fiction Research* was co-hosted by UCD Humanities Institute and UCD School of English, Drama and Film, with Trinity College Dublin.

The UCD Humanities Institute also continued its programme of digital outreach with downloads from its Soundcloud channel exceeding 38,000, with *The Dead* iPad app being downloaded 8,800 times and *Joyce's Dublin* podcast series now exceeding 30,000 downloads since its launch.

3. Energy

UCD has identified energy systems integration as an area of significant priority and opportunity for Ireland and the University. It builds on our existing internationally recognised strengths in electricity power systems

and geological sciences, and takes advantage of the strong working relationship between industry, academic teams and policy makers in this space, to make Ireland a world-leading location for energy systems integration activity.

Working with international partners in the National Renewable Energy Laboratory and the Danish Technical University, the aim is to bring the advances identified and tested in Ireland to broader application globally.

Energy Highlights

During the year the UCD Energy Institute launched a new Horizon 2020 project, *RealValue*, and the Institute received €1.2 million as part of the total €15.5 million EU initiative. The project will focus on testing local small scale energy storage using Smart Electric Thermal Storage (SETS), with real world implementation and testing in 1,250 homes in Germany, Latvia and Ireland.

The project aims to improve efficiency and value across the European energy market through the use of advanced ICT. The Institute will work with industry leaders on this project, including Glen Dimplex, INTEL, SSE, ESB and EirGrid.

4. Environment

The UCD Earth Institute is a large scale, multi-disciplinary research centre, which explores the complex interactions of the earth, its atmosphere and associated life systems. The majority of UCD researchers active in the earth and environmental sciences are members of this Institute, and their collaborative efforts are harnessed to address a number of grand challenges, including: climate change and natural hazards; finite natural resources; and the need for a sustainable built environment.

Work on these challenges is underpinned by expertise in a number of key disciplines such as water, climate, energy and resources, built environment, ecology and evolution, natural hazards and risk, environmental policy and behaviour, and crops for the future.



Pictured (l-r) at the launch of *Voices on Joyce*, published by UCD Press, which gathers together interpretations of Joyce's work by leading experts in a wide span of disciplines, are: co-authors of the publication, Professor Fran O'Rourke, UCD School of Philosophy, and Professor Anne Fogarty, UCD School of English, Drama and Film.



Environment Highlights

During the year Science Foundation Ireland (SFI) announced funding of €26 million for the Irish Centre for Research in Applied Geosciences (iCRAG). The Centre, which is a collaborative project between UCD, UCC, NUIG and TCD and industry, has five core PI applicants all of whom are fellows of the UCD Earth Institute, and members of the UCD School of Geological Sciences.

Geoscience underpins the discovery of raw materials, water and energy resources which is critical to the world's economy. With increasing demand and diminishing supply, focused innovations in geoscience are of paramount importance globally. The iCRAG centre will carry out research to find and harness these resources while protecting the environment.

In December 2014, Suzanne Kingston, UCD School of Law, was awarded an ERC Starter Grant for a project investigating how the way we design our laws influences levels of environmental compliance within the EU; and, furthermore, how one might change our laws in order to make

Senior UCD researchers presented the University's strategic plans for research and innovation, in Agrifood and Information Communication Technologies (ICT), to European Commissioners Carlos Moedas, responsible for Research, Science and Innovation, and Phil Hogan, responsible for Agriculture and Rural Development. Pictured (l-r) during their UCD visit in April are: European Commissioners Phil Hogan and Carlos Moedas; and Professor Orla Feely, UCD Vice-President for Research, Innovation and Impact.

environmental policy more effective. This brings the total population of ERC awardees within the UCD Earth Institute to six - 50% of the UCD total.

During 2015, UCD Earth Institute member Professor Fiona Doohan, UCD School of Biology and Environmental Sciences was awarded the Institute's second Marie Skłodowska-Curie Action ITN since the launch of Horizon 2020. Professor Doohan's CEREALPATH project offers an innovative graduate training programme in the field of crop science, part of the global challenge to address finite food resources. Dr Arturo Gonzalez, UCD School of Civil, Structural and Environmental Engineering was also awarded a Marie Skłodowska-Curie Action ITN for his project TRUSS, which addresses the need to reduce uncertainty in structural safety in environments facing increased impacts of climate change.

Social engagement and scientific outreach form an ongoing focus for the UCD Earth Institute. In December 2014, it hosted over 70 graduate students for the *Science & Solutions for a Sustainable Environment* conference supporting the PRTL1 5 Earth and Natural Sciences Doctoral Programme.

Innovation and enterprise are core principles of the Institute and, during the year, the UCD Earth Institute ran a number of one day Innovation Sprint programmes with the innovation team at NovaUCD.

5. ICT

Through its research, education and innovation programmes, UCD plays a major role in growing Ireland's ICT sector, generating global impact. The technology sector in Ireland directly employs over 105,000 people, with 75% employed in multinational companies and the remainder in the indigenous digital technology sector. The sector is responsible for 40% of Ireland's exports.

Data Science is the unifying theme of ICT research in UCD. This brings together three ICT programmes of research excellence and impact which support the University's broader research agenda: data analytics, Internet of Things, and smart systems. Data analytics enables insights and hidden trends to be identified in the vast sea of digital data generated every day. The Internet of Things will enable the step change in communications and electronics technology needed for a global network of sensors and actuators. Smart systems uses the breadth of ICT research to address major societal and economic challenges.

ICT Highlights

UCD appointed Professor Robert Bogdan Staszewski, a world renowned engineering researcher and innovator, to lead a cutting-edge research programme to increase Ireland's capability as a global centre for the

Internet of Things. Professor Staszewski, UCD School of Electrical, Electronic and Communications Engineering, was awarded €5 million in funding under SFI's Research Professorship Programme. The appointment is also supported by Analog Devices and Xilinx.

The appointment of Professor Robert Shorten, UCD School of Electrical, Electronic and Communications Engineering, jointly between IBM Research-Ireland and UCD, is further evidence of UCD's commitment to grow its research capability in this exciting new space.

Reflecting this commitment, UCD School of Electrical, Electronic and Communications Engineering also launched the IoE² Lab during the year. This is a multi-disciplinary research laboratory focused on developing enabling technologies and making scientific breakthroughs for next generation Internet of Things and future (5G) communication networks.

UCD School of Electrical, Electronic and Communications Engineering was also part of the successful consortium for the new SFI Centre, CONNECT. This Centre focuses on future broadband, cellular and Internet of Things networks on which future services will be enabled, thereby growing the economy and supporting society at large.

Smart systems researchers in UCD School of Computer Science and Informatics, and UCD School of Business also secured leadership positions as principal investigators in the newly launched SFI Centre, LERO. LERO's research mission is to replicate the success of traditional software engineering in the context of large scale, pervasive, physically integrated, highly interconnected, and continuously available systems.

All of these new developments complement UCD's leading role in national data analytics research centres, including Insight, CeADAR, and the UCD Centre for Business Analytics.

6. Health

The strategy for health research at UCD centres on connected health and personalised medicine. These platforms have the potential to transform our healthcare systems and create world-leading impact across a range of disease areas.

The UCD-affiliated Ireland East Hospital Group (IEHG), including the Mater Misericordiae University Hospital and St Vincent's University Hospital, was established by the Government in

2013, as a central element in the national restructuring of the Health Service. UCD is playing a key role in the mission of this network, in delivering improved patient care through research and education, in the contribution of healthcare to enterprise and economic development, and in establishing hospital groups as independent trusts. Collaborations are already emerging between hospitals in the network and UCD's research institutes, resulting in new research support services, joint EU funding applications and industry funding programmes.

Health Highlights

A research paper by Professor Des Higgins, UCD School of Medicine and Medical Science, which set the international standard for DNA sequence analysis, featured in *Nature's* Top 10 most highly cited research publications of all time. Professor Cormac Taylor, UCD School of Medicine and Medical Science, received the 2014 *Nature Award for Mentoring in Science* at the SFI 2014 Summit.

Professor Walter Kolch, Director, UCD Conway Institute, led a successful EU Horizon 2020 COFUND application for a postdoctoral programme in personalised medicine (*TopMed10*), worth €2.1 million. This supports 10 fellowships. He and Professor Martin Steinhoff, UCD School of Medicine and Medical Science, received SFI Investigator Programme awards for research on overcoming drug resistance in metastatic malignant melanoma by personalising treatment and neuro-immune communications in skin disease.

Professor Iain Mattaj, Director General, European Molecular Biology Laboratory (EMBL), and Professor Walter Kolch, Director, Systems Biology Ireland, based at UCD, signed a memorandum of understanding with the objective of enhancing cooperation between the two institutes. This is the first such agreement signed between EMBL and an Irish institution.

High impact publications during the period included a *New England Journal of Medicine* article on a new therapeutic approach to help obese patients achieve and maintain a healthier body weight. The article was published by a team including Professor Carel le Roux, UCD School of Medicine and Medical Science. An article in *Cell Metabolism*,

Dr Philip Campbell (left), Editor-in-Chief, Nature and Nature Publishing Group presenting UCD Conway Fellow, Professor Cormac Taylor, UCD School of Medicine and Medical Science, with the 2014 Nature Award for Mentoring in Science, at the Science Foundation Ireland 2014 Summit.



Pictured at NovaUCD is Dr Emmeline Hill, co-founder of Equinome, a UCD spin-out company, who was presented with the NovaUCD 2014 Innovation Award, in recognition of the global success and impact which Equinome has achieved in the international, multi-billion euro Thoroughbred horse racing and breeding industry.



by Professor Catherine Godson, UCD School of Medicine and Medical Science, showed that a molecule found in the body can protect against developing obesity related diseases by slowing, and possibly reversing, inflammation. The findings of an international study in *Nature*, outlining the genetics behind obesity, included work by Dr Eoin Brennan, a member of Professor Catherine Godson's research group.

Innovation

UCD is fully committed to its key role in Ireland's innovation and knowledge exchange ecosystem, both 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 industry, government agencies and social and cultural enterprises; the commercialisation of research outputs; the generation of new ventures; and the creation of jobs.

Entrepreneurial Students and Graduates

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

UCD Startup Stars

During the year UCD Startup Stars, a new support programme for UCD undergraduate students who want to work together to build start-ups, was devised and run by NovaUCD and the UCD Innovation Academy. UCD Startup Stars began with a series of cross-disciplinary workshops delivered over a three month period by the UCD Innovation Academy. Six early stage student ventures, with 16 team members, were then selected to participate in an intensive mentoring programme which took place over a four week period at NovaUCD.

The aim of this programme is to assist the students in refining their start-up ideas and included a series of structured workshops from industry experts, regular pitching sessions and mentoring. Following final pitches to a panel of judges, GradHow was declared overall winner of the inaugural programme.

GradHow is developing an online platform to help third level graduates better understand the employment opportunities that are relevant and available to them. The online tool for job seekers aims to improve connections between employers and universities, and to streamline the graduate employment process. The founders of GradHow are UCD Commerce students, Ben Chadwick, Alan John Browne and Stephen Duffy. The programme was sponsored by AIB, Arthur Cox, Deloitte, Ericsson, Goodbody Stockbrokers, Pay with Fire, and Xilinx.

2015 BT Young Scientist Business Bootcamp

The BT Business Bootcamp, delivered annually by BT in partnership with UCD, bridges the gap between education and business for students who demonstrate entrepreneurial flair and business acumen. Now in its sixth year, the four day innovation and skills camp, held at NovaUCD, involved 29 second level students from across Ireland who demonstrated an ability to understand how and why a simple idea can be developed into a commercially viable enterprise. The participating students were selected in January, from over 1,200 secondary school students who competed in the 2015 BT Young Scientist and Technology Exhibition.

This year BT and UCD partnered with the Khalifa University of Science, Technology and Research, and delivered the first international BT Business Bootcamp in Abu Dhabi, United Arab Emirates.

Partnering with Industry

UCD has a strong track record of working with industry and the University seeks strong and strategic engagement with business, social and cultural enterprises, in order to add value, expand networks and explore 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 and collectively have a staff of 375 based on campus. These companies, which cover sectors from agriculture and food to life sciences, and from ICT to physical sciences, engineering and cleantech, are based at either NovaUCD or NexusUCD.

Connected Health Technology Centre

In May, Minister for Jobs, Enterprise and Innovation, Richard Bruton TD, launched the €5 million Applied Research for Connected Health (ARCH) Technology Centre, funded through Enterprise Ireland, and IDA Ireland. ARCH is headquartered at NexusUCD, where researchers from clinical, engineering, technology, policy and economic fields, with input from University of Limerick, collaborate to deliver on the connected health research agenda defined by its industry steering group. Fifteen industry partners steer ARCH's research programme.

AIB Partnership and Innovation Initiative

During the year AIB announced a major investment in a seven year partnership and innovation initiative with UCD. AIB has a long-standing relationship with UCD, and AIB was a founding sponsor of NovaUCD. This new innovation partnership seeks to support academic and innovation expertise that can enable initiatives designed to improve the economic and social wellbeing of the country. It will promote scholarship in the areas of leadership, service to the community and knowledge transfer.

Commercialisation of Research Outputs

NovaUCD provides purpose-built, state-of-the-art incubation facilities for knowledge-intensive companies alongside a comprehensive business support programme. During the year NovaUCD hosted many visitors who sought to learn more about UCD's success in commercialisation and entrepreneurial activities. These included Minister for Communications, Energy and Natural Resources, Alex White TD, Minister for Skills, Research and Innovation, Damien English TD, and UK Government Minister, Grant Shapps MP. International delegations included those from Botswana, China, France, Norway, Russia, Turkey, and Vietnam.

UCD announced during the year the appointment of Dr Sharon O'Kane, and Dr Sean Baker as the first two NovaUCD Entrepreneurs in Residence. This programme has been established to bring external business experience and expertise to assist the development and growth of UCD spin-out and spin-in companies, as well as the wider UCD entrepreneurial community.

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 our research programmes. Assistance is also provided for 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 support researchers in the commercialisation of IP outputs, through a series of training programmes including the Innovation Sprint, Commercialisation Bootcamp and VentureLaunch Accelerator programmes.

Researchers from UCD and NCAD reported a total of 59 inventions. In addition, 17 priority patent applications were filed by UCD and NCAD

Pictured (l-r) at the official opening of AIB's refurbished branch on the UCD campus and the announcement of AIB's seven year partnership and innovation investment in UCD are: Professor Andrew Deeks, UCD President, and David Duffy, CEO, AIB.



across areas of design, engineering, information and communication technology, and life sciences. Twenty five licence agreements were also concluded by UCD with a range of indigenous and international companies and five new UCD spin-out companies incorporated.

UCD Commercialisation Programmes

During the year 17 researchers from Agri-Food, Life Science and Engineering completed one of three one day UCD Innovation Sprint programmes, delivered by NovaUCD in collaboration with the UCD Earth Institute. 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.

Twenty researchers completed two UCD Commercialisation Bootcamps delivered at NovaUCD. Participants on the Bootcamps represented a total of 17 potential commercial projects emerging from research taking place at UCD. The overall aim of the UCD Commercialisation Bootcamp is to strengthen the pipeline of commercial opportunities arising from UCD and NCAD research programmes.

NovoGrid, a new UCD engineering spin-out, was declared overall winner of the 2014 UCD VentureLaunch Accelerator Programme. This programme supports the creation and launch of sustainable and profitable new ventures based on intellectual property emerging from UCD and NCAD research programmes.

NovoGrid has developed an intelligent control system to enable wind farm owners to reduce energy losses associated with the transfer of electricity to national grids, thereby assisting them to improve energy efficiencies and to increase revenues. NovoGrid, a spin-out from the Electricity Research Centre, UCD School of Electrical, Electronic and Communications Engineering, was co-founded by Dr Andrew Keane, Dr Peter Richardson and Paul Manning.

Knowledge Transfer Ireland 2015 Impact Awards

UCD won two of the four 2015 Knowledge Transfer Ireland Impact Awards. The 2015 Licence2Market Impact Award was won by Professor Mark Rogers, UCD Deputy President and Registrar, for his development of a novel diagnostic test for BSE, which was subsequently licensed to Enfer Scientific, by UCD. The 2015 Spin-out Company Impact Award was won

by the co-founders of OxyMem, Professor Eoin Casey and Dr Eoin Syron, UCD School of Chemical and Bioprocess Engineering, in recognition of the achievements made by the company during the last year.

2014 NovaUCD Innovation Award

The 2014 NovaUCD Innovation Award was presented to Dr Emmeline Hill, a leading genomics researcher in the UCD School of Agriculture and Food Science. The award was presented to Dr Hill in recognition of the global success and impact which Equinome, a UCD spin-out company she co-founded in 2009 with Jim Bolger, the renowned Irish racehorse trainer and breeder, has achieved in the international, multi-billion euro Thoroughbred horse racing and breeding industry.

OxyMem

OxyMem, a UCD spin-out company, won a number of national and international awards during the year, including: Imagine H₂O Infrastructure Challenge (Growth Stage) Award 2015; Energy Efficient Technology of the Year Award, UK Energy Awards 2014; Sustainable Energy Innovation Award 2014; and Overall Excellence in Intellectual Property Award, Intellectual Property Awards 2014.

OxyMem was co-founded in 2013 by Professor Eoin Casey and Dr Eoin Syron as a spin-out from UCD School of Chemical and Bioprocess Engineering. OxyMem's 'bubbleless' wastewater aeration system for wastewater treatment is typically four times more energy efficient than best-in-class solutions currently available on the market.

Fundraising Success

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

Corlytics, a financial software company headquartered at NovaUCD, secured a €1 million syndicated investment and plans to double its staff numbers to 30 to support its growth. The investment is through the Bank of Ireland Seed and Early Stage Fund, which is managed by Kernel Capital, with co-investors Enterprise Ireland, angel investors and company founders. Founded in 2013, Corlytics has developed a platform which enables global financial institutions to identify avoidable losses and fines, empowering them to minimise regulatory breaches by using predictive risk analytics applications to evaluate, benchmark and manage market risk.



Pictured (l-r) at the UCD School of Physics are Professor Lorraine Hanlon and Dr Sheila McBreen, co-founders of the UCD spin-out company, Parameter Space, which has secured €800,000 in funding from the European Space Agency (ESA), with Dr William O'Mullane, Head of Operations Development Division, ESA.

Pictured (l-r) are Minister for Skills, Research and Innovation, Damien English TD; Professor Barry Smyth, UCD School of Computer Science and Informatics; and Professor Mark Ferguson, Director General, Science Foundation Ireland, at the SFI Science Summit, where Professor Smyth was named as Science Foundation Ireland Researcher of the Year 2014.



Equilume, a UCD spin-out company, secured €550,000 in seed funding from Enterprise Ireland and a number of angel investors based in Ireland, the UK and US. The company intends to use the investment to accelerate sales of its innovative Equilume Light Mask technology within the global Thoroughbred industry, in order to assist breeders to maximise the reproductive efficiency and performance in their horses. The Equilume Light Mask has been developed by Dr Barbara Murphy, UCD School of Agriculture and Food Science, in collaboration with Professor John Sheridan, UCD School of Electrical, Electronic and Communications Engineering.

HeyStaks, a UCD spin-out company headquartered at NovaUCD, raised €1.5 million as part of a strategic partnership with Digicel. The investment will be used to bring the HeyStaks mobile Intent Analytics platform to customers in Asia, the Middle East and the Americas. The company also plans to create up to 20 jobs within the next year in a combination of commercial and technical roles. HeyStaks was founded in 2008, by Dr Maurice Coyle, Dr Peter Briggs and Professor Barry Smyth as a spin-out from the SFI funded Clarity Centre for Sensor Web Technologies, now part of the Insight Centre for Data Analytics.

InVivo, the largest agricultural cooperative group in France, and a leading player in the industry globally, acquired a 50% stake in Life Scientific, an R&D company which specialises in off-patent crop protection products. As a result of this new partnership, Life Scientific, a UCD spin-in company, plans to create 20 new, predominantly research and development jobs at NovaUCD over the next five years.

Parameter Space, a UCD spin-out company, secured a €800,000 contract from the European Space Agency (ESA) to fund a three year project creating four jobs. The objective of the project is to develop new software capable of exploiting the unprecedented volume of data from ESA's Gaia satellite. Parameter Space was co-founded in 2014 by Professor Lorraine Hanlon and Dr Sheila McBreen, as a spin-out from UCD School of Physics.

Q-Validus, a certification standards company headquartered at NexusUCD, secured €370,000 in funding, over two years, as part of a €3.1 million AquaSmart project being funded through the European Commission's Horizon 2020 Programme. Q-Validus will use the funding to deliver the quality assurance aspects of the AquaSmart project.

UCD Innovation Academy

The Innovation Academy is a joint initiative between University College Dublin, Trinity College Dublin and Queen's University Belfast, which aims to develop a new kind of PhD graduate with a thorough understanding of how innovation can convert knowledge into products, services and policies for economic, social and cultural benefit. While initially focused on teaching creativity and entrepreneurial thinking to PhD students, the UCD Innovation Academy now works with undergraduates, postgraduates, educators and with organisations and partners beyond academia.

This year saw the highest number of students to date engaging with the UCD Innovation Academy. The newly expanded undergraduate general elective offering for the modules - Introduction to Creative Thinking, and Entrepreneurial Endeavour - grew from 33 students last year to 169 students.

Over 300 students also participated in the graduate certificate in Innovation, Entrepreneurship and Enterprise, funded by the Higher Education Authority Springboard Initiative, and delivered in Dublin, Kilkenny, Athlone and Waterford. During this course students worked collaboratively on a series of industry-based innovation challenges, working with 45 organisations throughout the year. Over 230 students received certificates of award with ceremonies taking place at Kilkenny Castle and at Croke Park, which was attended by Gerald Nash TD, Minister for Business and Employment.

UCD Innovation Academy also delivered modules in Creative Thinking and Innovation, and Opportunity Generation and Recognition, to 37 PhD students, including students on the joint UCD-TCU-QUB Graduate Certificate in Innovation and Entrepreneurship. In partnership with NovaUCD, UCD Innovation Academy designed and ran the inaugural UCD Startup Stars programme.

During the year 24 professional educators participated in the Professional Certificate and Diploma for Entrepreneurial Educators. This course is designed for secondary teachers, third level lecturers, and professional trainers with the objective of equipping participants with the skills and methodologies to bring entrepreneurial thinking into their classrooms.

Professor Suzi Jarvis, founding Director, UCD Innovation Academy, and Dr Colman Farrell, Executive Director, UCD Innovation Academy, presented on Enabling Creative and Entrepreneurial Mindsets at the one day conference on *Sharing Smart Approaches to Optimising Quality*, organised by Quality and Qualifications Ireland.

The UCD Innovation Academy also hosted the Universitas 21 Early Career Researcher Workshop on Innovation and Entrepreneurship with Dublin City Council at UCD, and at Dublin City Council's Wood Quay Offices.



Veterinary Medicine students pictured at the 10th Annual UCD Veterinary Hospital Conference, held in July in O'Reilly Hall.



Professor Michael Monaghan
College Principal

UCD College of Agriculture, Food Science and Veterinary Medicine consists of two schools:

UCD School of Agriculture and Food Science
Head of School/Dean
Professor Alexander Evans

UCD School of Veterinary Medicine
Head of School/Dean
Professor Grace Mulcahy

As of September 2014

I am pleased to report that UCD College of Agriculture, Food Science and Veterinary Medicine had another successful year with substantial progress being made in achieving the strategic objectives of the College. The objectives include: achieving international recognition for our teaching programmes; delivering research with impact for agriculture, the food industry and animal health; and providing high quality services in the UCD Veterinary Teaching Hospital.

Education

Re-accreditation of the Veterinary Medicine degree programme by the American Veterinary Medical Association Council on Education, for the maximum period of seven years (2014-2021), reaffirms the global position of the UCD School of Veterinary Medicine as a leading player in international veterinary education and research. The school is one of only a handful of European schools to achieve this accreditation. The school also achieved a world ranking of 40 in the first year that the QS subject rankings have considered Veterinary Science.

Two new graduate taught programmes were launched by UCD School of Veterinary Medicine. The new Graduate Certificate in Small Animal Medicine enables veterinary practitioners to enhance their professional skills and competencies in this area. The Professional Certificate on Experimental Animal Use, Regulations and Procedures (TEARAP) provides required certified training for researchers from UCD and from other institutions, as

required under EU and Irish legislation. Two established graduate taught programmes in dairy herd health and equine sports medicine were accredited by the Royal College of Veterinary Surgeons (RCVS) in the UK, as meeting the requirements for advanced practitioner status. This validates the School's strategic approach in providing programmes for practising veterinary professionals as Europe moves towards recognising a middle tier of advanced practitioners, in addition to established specialists.

Demand for Agriculture and Food Science graduates continues to be strong among employers as indicated by the large number of exhibitors at the UCD Agriculture, Food Science and Human Nutrition Careers Day. This annual event, organised by students, for students, was officially opened by the Minister for Agriculture, Food and the Marine, Simon Coveney TD, who addressed the 298 final year undergraduate students.



Minister Coveney opens the jobs focused UCD Agriculture, Food Science and Human Nutrition Careers Day. Pictured (l-r) are: Professor Alex Evans, Dean, UCD School of Agriculture and Food Science; Minister for Agriculture, Food and the Marine and Defence, Simon Coveney TD; and Ms Rebecca O'Sullivan, Chairperson, Agricultural Science Careers Committee.

and Technology Centre. The tri-partite agreement aims to improve feeding efficiency, animal health and reduced environmental impact of dairy farming.

The second was with the University of California, Davis (UC Davis), to further develop education, research, innovation and cultural links between the two institutions. The agreement builds on established links, particularly in the areas of agriculture, food and health, in which both lead internationally. UCD School of Veterinary Medicine is also partnering with UC Davis in the area of One Health.

Dr Emmeline Hill was recognised through the 2014 NovaUCD Innovation Award for the global success and impact which Equinome has achieved in the multi-billion euro Thoroughbred race horse industry. Equinome, a UCD spin-out company, was co-founded in 2009 by Dr Hill in partnership with Jim Bolger, the renowned Irish trainer and breeder.

UCD and Keenan join the Chinese Academy of Agricultural Sciences to form the China-Ireland Dairy Science and Technology Centre. Pictured (l-r) at the signing ceremony in Beijing are: Gerard Keenan, Executive Chairman, Richard Keenan and Co. Ltd; Professor Li Ming, Director of the Institute of Animal Sciences; and Professor Alex Evans, Dean UCD School of Agriculture and Food Science. Also pictured are: Irish Ambassador to China, H.E. Paul Kavanagh; Minister for Agriculture, Food, the Marine and Defence, Simon Coveney TD; Minister of Agriculture of the People's Republic of China, Han Changfu; Director General of the Department of Animal Husbandry, Wang Zhongli; and Director General International Cooperation of Ministry of Agriculture, Wang Ying.

Research, Innovation and Impact

It has been another very good year for research in the College. Highlights include the award of a European Research Council (ERC) consolidator grant to Professor Lorraine Brennan, to research the development of new nutrition research tools. Science Foundation Ireland (SFI) funding was awarded to Professors John O'Doherty and Torres Sweeney, for a project which will identify alternatives to antibiotics used in veterinary and human medicine. Professor David Brayden received funding as co-investigator for the SFI Centre 'CURAM' which is developing smart medical devices. Vaccine research continues to be a major research theme with SFI and EU Horizon 2020 funding for Professors Stephen Gordon (tuberculosis in animals) and Grace Mulcahy (animal parasites).

UCD School of Agriculture and Food Science also signed two major collaborative research agreements. The first was in conjunction with Richard Keenan & Co. Ltd., and the Chinese Academy of Agricultural Sciences, to form the China-Ireland Dairy Science



UCD Veterinary Hospital operates a welfare fund to help those who cannot afford treatment of their animals. Pictured (centre) is Amanda Lawlor, UCD School of Veterinary Medicine, presenting the funds she raised for the welfare fund to (l) Bernadette Rafter, Commercial Director, UCD Veterinary Hospital, and (r) Dr Rory Breathnach, Clinical Director, UCD Veterinary Hospital.



If your pet needs to see a specialist veterinarian - ask your vet to refer you to the UCD Veterinary Hospital



Engagement and Partnership

The new Dairy Research and Education Facility at Lyons Farm entered service in March 2015, and has been recognised as an important new player in the Irish dairy industry.

Teagasc continues to be an important research partner for the College, with the award of a further nine new Postgraduate Fellowships joining the existing 125 Fellows already funded under the Walsh Fellowships Programme. The new Fellows will work across a range of areas in dairy, beef and pig production, climate change and on the engagement of dairy farmers with health and safety on farm.

UCD and Teagasc, in association with the Agricultural Science Association (ASA), presented *Advances in Knowledge and Technologies for Agriculture* in June 2015. This conference highlighted relevant new technologies

under development by Teagasc and UCD, which already have, or will soon bring benefits to farmers and the industry.

President of Ireland, Michael D. Higgins, opened the Irish Humanitarian Summit held in UCD O'Reilly Hall, which was jointly hosted by the Irish Government and UCD's Centre for Humanitarian Action, based within the UCD School of Agriculture and Food Science. The summit brought together members of the Irish and international NGO community, academia, the private sector, the UN, and the Irish government to discuss recommendations due to go to the wider World Humanitarian Summit, to be held in Istanbul in 2016.

A number of Adjunct Faculty appointments of staff of the Central Veterinary Research Laboratory were made by UCD School of Veterinary Medicine. Closer alignment between the two organisations in veterinary research will result in enhanced competitiveness for future funding.



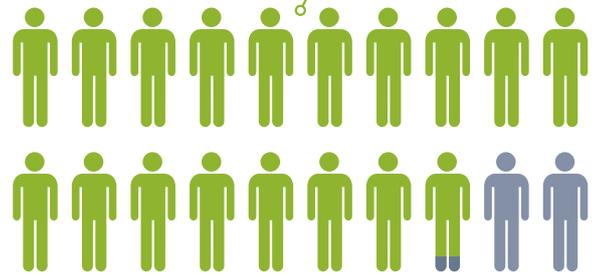
Pictured (l-r) are: Professor Gerry Boyle, Director, Teagasc; Michael Berkery, Chair National Agriculture Research, Education and Innovation Partnership; Bill Callanan, ASA Council; and Professor Alex Evans, Dean UCD School of Agriculture and Food Science, at the *Advances in Knowledge and Technologies for Agriculture* conference in association with Teagasc, UCD, and the Agricultural Science Association (ASA).



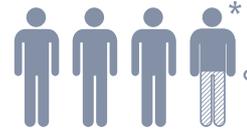
American delegates at the 2015 ICRPS Summer School pictured with (centre) Professor Alex Evans, Dean UCD School of Agriculture and Food Science, Mairead McGuinness MEP, Dr James Breen (3rd from r) and Dr Karen Keaveney (2nd from r), UCD School of Agriculture and Food Science.

UCD Students in Ireland

Undergraduate Students (FTE) **1,790**



Graduate Students (FTE) **556**



Total Students **2,346**

*  = 100 People Approx

UCD Veterinary Hospital provided increasingly sophisticated referral services to the community and to veterinary practitioners. Its caseload continued to grow in the past year and the 10th Annual Veterinary Hospital Conference attracted a record attendance.

All of these achievements are the result of the hard work of the faculty and professional staff in the two schools. As a result of administrative re-structuring at the University, UCD College of Agriculture, Food Science and Veterinary Medicine will be amalgamated with UCD College of Health Sciences, from September 2015, to create the new UCD College of Health and Agricultural Sciences. The new College will be led by Professor Cecily Kelleher. I wish them continued success in the years ahead.

M. L. Monaghan

Professor Michael Monaghan
Principal

Research Awards

€15,000,000



UCD School of Agriculture and Food Science exhibit at the 2014 National Ploughing Championships, Ratheniska, Co. Laois, attended by more than 280,000 people.





Visiting the National Folklore Collection at UCD, are (l-r): Professor Rionach Uí Ógáin, Director, National Folklore Collection, and Michael D. Higgins, President of Ireland. The President viewed materials collected by scholars, in both Irish and English, dating back to the early 1900s.



Professor Maeve Conrick
College Principal

UCD College of Arts and Celtic Studies enjoyed a very successful year, with numerous developments, achievements and projects coming to fruition across all our activities in the Arts and Humanities. Among the many highlights of the year was the agreement by the President of Ireland, Michael D. Higgins, to become Patron of the National Folklore Collection/Cnuasach Bhéaloideas Éireann. President Higgins visited UCD in March, where he viewed some of the materials collected by scholars in both Irish and English, dating back to the early 1900s.

The Aurora Leadership Programme for Women, in association with the Leadership Foundation (UK) was launched as a pilot by UCD HR Training and Development, with Professor Maeve Conrick, College Principal, as UMT Aurora Champion. Fifteen members of faculty and staff benefitted from the various modes of engagement offered over the course of the year, including full-day workshops and sessions with individual mentors from across UCD who provided support for participants. Reviews of the programme proved highly successful with the result that the University decided to continue to run the programme again for the coming year.

Research, Innovation and Impact

A further highlight of the year was the publication by Yale University Press, of a five-volume authoritative and fully illustrated account of 1600 years of *Art and Architecture in Ireland, from the early Middle Ages to the end of the twentieth century*, for the Royal Irish Academy and the Paul Mellon Centre. The project had its genesis in an original idea from Dr Nicola Figgis and Professor Paula Murphy, UCD School of Art History and Cultural Policy, who also edited and contributed to some of the volumes. In launching the publication, An Taoiseach Enda Kenny TD, described it as “a treasure trove that showcases our artistic heritage like never before and is a fitting celebration of our extraordinary, but often unrecognised, visual culture - in painting, in sculpture and in the ultimate social art, architecture”.

The College has, in collaboration with the University, national and global community, contributed to the UCD Decade of Centenaries programmes across a range of activities. They include: publications, such as *A nation and not a rabble: the Irish Revolution, 1913-1923* (authored by Professor Diarmaid Ferriter), and the *Handbook of the Irish Revival* (edited by Declan Kiberd and PJ Mathews); conferences, such as *Universities in Revolution and State Formation*; seminars, such as the *Global Years: UCD Years 2015 Commemoration*; and the performance of *Desolation* by the UCD Choral Scholars. We look forward to continuing our contribution to the future programme with planned events such as the *1916 as a Global Event* lecture series and the *Revolution: Results and Reappraisal* conference and exhibition.

Deputy Principal:
Professor Tadhg O’Keeffe

Director of Graduate
School: Dr Alexander
Wilkinson

Vice-Principal for
Teaching and Learning:
Mr Feargal Murphy

Vice-Principal for
Research, Innovation
and Impact:
Dr Porscha Fermanis

Dean of Arts: Professor
Muiris Ó Súilleabháin

Dr Éilís Ní Dhuibhne, UCD School of English, Drama and Film, received the 2015 Irish PEN award for Outstanding Contribution to Irish Literature. Set up in 1998, this award honours an Irish writer who has made an outstanding contribution to Irish Literature through a significant body of work, written and produced over a number of years.

Among the numerous conferences hosted by the College was the *Bridging Divides: Art & Design in Canada*, organised in May by the Craig Dobbin Chair of Canadian Studies, Professor Brian Foss, in conjunction with the Association of Canadian Studies in Ireland, of which Professor Michael Brophy, UCD School of Languages and Literatures, is President. The College also hosts the Keith Cameron Chair in Australian History. Among activities in this sphere was the launch of the database of Irish-born individuals who served with the Australian forces in the First World War by Minister for Foreign Affairs and Trade, Charlie Flanagan TD. The project, under the direction of Professor Jeff Kildea, former Keith Cameron Chair of Australian History, was carried out with the University of New South Wales, Australia.

The College continues to attract significant funding from the Irish Research Council, highlighting the quality of our research and enabling us to continue developing top quality researchers for the future. Our research continues to attract funded support from a range of international and national sources, such as the Wellcome Trust, the Gerda Henkel Foundation, the Irish Research Council, Enterprise Ireland, the Department of An Taoiseach, and the Department of Arts, Heritage and the Gaeltacht.

Education and Student Experience

Students of the College performed excellently this year, with notable success in international competitions such as the Guardian First Book Award, which was won by Colin Barrett, a graduate of the MA in Creative Writing in 2014, for his *Young Skins* collection. Colin is also the recipient of the Caroline Walsh Memorial Award sponsored by *The Irish Times* to support a student of the Masters in Fine Arts at UCD.

Noel Woods, an MA candidate in Modern Irish at UCD School of Irish, Celtic Studies and Folklore, was the recipient of a Fulbright Foreign Language Teaching Assistant award, which he is taking up at the University of Notre Dame, Indiana. This was one of six awards won by UCD this year.

Schools continue to find new ways to support top quality national and international scholars: for example, the introduction of the Gus Martin Memorial Postgraduate Scholarship in Anglo-Irish Literature and Drama for a US student was announced by President Deeks on his visit to the US in April 2015.

Engagement and Partnership

The College is a hub of cultural and artistic activity, with numerous links with national and international bodies and organisations promoting the arts in all its forms, from drama to film and music. Dominic Thorpe became the first UCD Humanities Artist in Residence. Rosaleen

UCD College of Art and Celtic Studies consists of eight schools:

UCD School of Archaeology
Head of School
Professor Gabriel Cooney

UCD School of Art History and Cultural Policy
Head of School
Dr Lynda Mulvin

UCD School of Classics
Head of School
Professor Theresa Urbainczyk

UCD School of English, Drama and Film
Head of School
Professor Anne Fogarty

UCD School of History and Archives
Head of School
Dr Tadhg Ó hAnnracháin

UCD School of Irish, Celtic Studies, Irish Folklore and Linguistics
Head of School
Professor Máire Ní Annracháin

UCD School of Languages and Literatures
Head of School
Dr Georg Grote

UCD School of Music
Head of School
Dr Jamie Jones

As of September 2014

Booker prize-winning author, Anne Enright has been named as the inaugural Laureate for Irish Fiction. The three year role is a new initiative developed by the Arts Council, with support from UCD, New York University, and The Irish Times. The author is photographed with James Ryan, director of the creative writing programmes, UCD School of English, Drama and Film.



Participants in the Aurora Leadership Development Programme, pictured (from centre left) at the official launch with UCD President, Professor Andrew Deeks, and Professor Maeve Conrick, Principal, UCD College of Arts and Celtic Studies, programme sponsor.



Linehan, who received a 2014 UCD Foundation Day Alumni Award, is an example of a BA graduate who went on to achieve great distinction in the theatre world.

Booker prize-winning author Anne Enright was named as the inaugural Laureate for Irish Fiction, in January. This three year role is an initiative developed by the Arts Council in partnership with UCD, New York University, and *The Irish Times*. During her three year term the Laureate will teach creative writing to students at UCD.

Members of the College continue to contribute to public life in Ireland by their membership of key national bodies, such as the Higher Education Authority (Professor Maeve Conrick, College Principal) and the Board of RTÉ (Dr PJ Mathews, UCD School of English, Drama and Film).

College Developments

A major capital development initiative this year was the announcement, by the Minister for Transport, Tourism and Sport, Paschal Donohue TD, of a €2.5 million grant from Fáilte Ireland's Capital Programme towards funding of the Ulysses Centre. This is UCD's proposed €10 million development of an international literary centre in Newman House, on St Stephen's Green, Dublin, in partnership with the National Library. Professor Margaret Kelleher, UCD School of English Drama and Film, is the academic lead on the project, which is expected to be completed by the end of 2017.

The College and its schools focused on developing strategic plans, in line with the University's strategic planning cycle 2015-2020, and began



Delegates at the Ninth International Experimental Archaeology Conference (EAC9), organised by the UCD School of Archaeology, viewed a pottery firing demonstration while on a visit to the UCD Centre for Experimental Archaeology and Ancient Technologies, situated on the UCD campus.

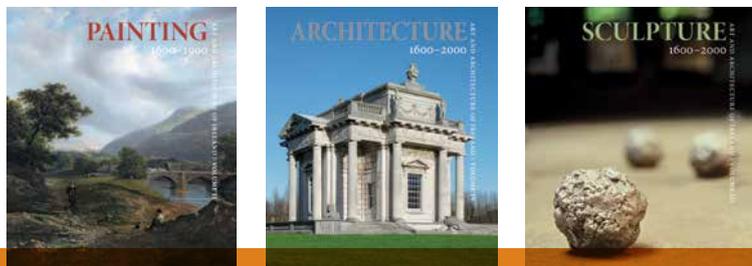


Minister for Foreign Affairs and Trade, Charlie Flanagan TD, speaking in UCD at the launch of the Irish Anzacs Database of Irish-born individuals who served with the Australian forces in the First World War. The project, under the direction of Professor Jeff Kildea, 2014 Keith Cameron Chair of Australian History, was carried out with the University of New South Wales, Australia.

the implementation of plans to: build on our key strengths in research and reputation; expand our quality programmes globally; highlight the achievements of students and alumni; engage with the local, national and international community with the aim of strengthening our disciplines; and continue to develop world-class facilities.

Maeve Conrick

Professor Maeve Conrick
Principal



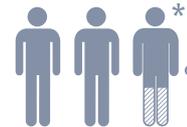
Three of the five volume work, Art and Architecture of Ireland, published by Yale University Press. The project which spans 1600 years of art and architecture in Ireland had its genesis in an original idea from Dr Nicola Figgis and Professor Paula Murphy, UCD School of Art History and Cultural Policy, who also edited and contributed to some of the volumes.

UCD Students in Ireland

Undergraduate Students (FTE) **2,698**



Graduate Students (FTE) **516**



Total Students **3,214**

Overseas Operations

Undergraduate Students (FTE) **18**



* = 100 People Approx

Research Awards

€2,100,000





Pictured (l-r) at UCD School of Business 2015 'Alumni of the Year' awards are: Professor Ciarán Ó hÓgartaigh, College Principal, UCD College of Business and Law; Jim Gannon, UCD Michael Smurfit Graduate Business School student of the year; Breege O'Donoghue (BComm '72), UCD Lochlann Quinn School of Business alumnus of the year; Mark Byrne, UCD Lochlann Quinn School student of the year; and Gordon Hardie (MBA '94), UCD Michael Smurfit Graduate Business School alumnus of the year.



Professor Ciarán Ó hÓgartaigh
College Principal

UCD College of Business and Law consists of two schools:

UCD School of Business
Head of School/Dean
Professor Ciarán Ó hÓgartaigh

UCD School of Law
Head of School/Dean
Professor Joseph McMahon

As of September 2014

2014/15 was another purposeful year for UCD College of Business and Law, building on existing strong foundations, with the continued execution of the College's strategy in support of the overall University Strategy.

College Developments

Led by a commitment to research, innovation and impact our purpose is to re-imagine business education, providing transformational learning experiences. Right across our portfolio of undergraduate, postgraduate, executive and international programmes, we strive to educate skilled, engaged, reflective individuals who have an understanding of their capacity and responsibility in a complex and globalised world. We work to challenge and enable leaders of today and tomorrow to develop the insight, expertise and impetus they need to make an impact in their fields.

Both UCD Sutherland School of Law and UCD Lochlann Quinn School of Business again showed a marked increase in the demand for undergraduate programmes. This outcome is a testament to all who contribute to making the undergraduate experience meaningful and worthwhile. Due to this high demand there was a significant increase in the CAO points allocated for all undergraduate programmes, emphasising the quality of our student intake. Interdisciplinary programmes such as Business and Law (BBL) and Law dual degree/Maitrise (BCL) are proving to be a continued success, being

filled in the first round. We have further extended our international reach: almost 50% of students admitted to UCD Michael Smurfit Graduate Business School are from overseas, with over 50 countries now represented within the School.

Maintaining our commitment to the concept of lifelong, continuous learning, UCD Smurfit Executive Development continued to make steady progress, announcing new developments to its growing portfolio of open enrolment programmes, masterclasses and client-customised programmes.

Through The Centre for Distance Learning (CDL), our overseas programmes continued to develop with over 4,000 students studying for undergraduate and graduate degree programmes at campuses in Hong Kong, Singapore, and Sri Lanka.

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



Pictured (l-r) at the New York Benefit Dinner for the UCD School of Business are: Professor Damien McLoughlin, UCD School of Business; Shaun Kelly, Chair North American Business School Advisory Board; Brian O'Byrne, UCD School of Business alumnus; Emer Gilvary, Irish Business School Advisory Board; Paul Haran, former Chairman UCD Michael Smurfit Graduate Business School; and Tony Condon, UCD School of Business.

interdisciplinary programmes, progress our research capabilities, and address important global problems. The high standards of our staff and students are reflected in our accreditations and rankings.

Accreditation and Rankings

For the first time in the history of the School, UCD Sutherland School of Law has been ranked as Ireland's number one Law School, by QS World University Rankings. The rankings for law show that the School has the highest aggregate score of any Irish university law school for academic reputation, employer reputation, citations per paper and H-index citations, and is testament to the high calibre research output by the law faculty. The rankings also place UCD Sutherland School of Law among the top 100 law schools in the world.

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). We continue to commit to the UN-backed Principles for Responsible Management Education (PRME) and submitted

A team of UCD students, led by Aoife Buckley, an MSc student in Management Consultancy, UCD Michael Smurfit Graduate Business School, represented Ireland at the 2014 Enactus World Cup final, in China in October. The team beat stiff competition from 35 other countries to make it to the final four. The team secured a place at these finals after winning the 2014 Enactus Ireland National Competition, for their social entrepreneurship project entitled 'Generation Accommodation', which matched students who cannot afford to pay rent with elderly people living alone. Pictured (l-r) are: Constantin Lenk, Stephanie O'Malley, Aoife Buckley, Andrea Harvey, Roisin Lee, Patricia Kastner, Eimear O'Donnell and Cian O'Sullivan.



the School's PRME *Sharing of Information on Progress* report for 2013-2015 over the summer months. We have an enviable reputation as the only Irish business school whose degrees are internationally ranked amongst the top 100, by the two highest respected ranking publications: the *Financial Times* and *The Economist* magazine.

These international accreditations, alliances and memberships provide a quality signal for students and reinforce our commitment to position and benchmark UCD School of Business against the best-in-class internationally.

Investing For a World-Class Student Experience

The way we live, work and learn is changing and, during the period of the Report, UCD School of Business set out our ambition to fundamentally refocus our teaching and learning efforts on innovation and student engagement, and to begin a process of reimagining the future of business education. To support this plan, we embarked on a special fundraising campaign with UCD Foundation, committing to a game-changing investment in transformative learning and the student experience. Phase one of this project is underway with an internal conversation and stakeholder dialogue about where business education is and where it is going.



Photographed (l-r) at the One Youth World Global Forum, held in October, with UCD School of Business students and School of Business faculty: Dr Colm McLaughlin, Dr Maeve Houlihan, Dr Bruce Martin, and Professor Andy Prothero.



Research

The UCD School of Business continued to excel in research outputs which include publishing in leading international journals, research monographs, editorial and reviewer duties at leading academic journals, conference organisation, case study writing, PhD supervision and external examination, and international research linkages.

Members of UCD School of Business attracted significant research funding this year. Of particular note, new funding awards saw our researchers reaching out to collaborate with other disciplines, for example, to healthcare, with Professor Susi Geiger's Marie Curie Fellowship, and to software, with Professor Michael O'Neill's distinguished LERO (Irish Software Research Centre) award from Science Foundation Ireland.

Dr Suzanne Kingston, UCD Sutherland School of Law, was awarded funding under the prestigious European Research Council (ERC) Starter Grant scheme, of which there were only two awarded across Irish institutions under the Social Sciences and Humanities panel. Dr Kingston's project, entitled *The Influence of 'New Environmental Governance' Rules on Environmental Compliance*, will investigate how governance rules influence our environmental compliance decisions, and how we could design them to improve compliance.

Societal Engagement

We were delighted to host the Proudly Made in Africa (PMiA) Teaching Fellowship, and thank Siobhan McGee, who worked closely with our faculty and students. The PMiA Fellowship is consistent with our strategy of developing graduates in the world and for the world; and seeks to better inform business students' perceptions of Africa as a place to do business.

Pictured (l-r) at the Mexico-Ireland Speaker Series May 2015, a collaboration between UCD Michael Smurfit Graduate Business School and the PanAmerican Institute of High Direction of Business of Mexico (IPADE) are: Dr Pedro Aspe Armella, Professor Ciarán Ó hÓgartaigh, College Principal, UCD College of Business and Law; and Mexican Ambassador, H.E. Carlos García de Alba.



Pictured (l-r) at the inaugural Walsh Lecture, in memory of Mr Justice Brian Walsh, are: Dr Declan McCourt, Chairman, UCD Law Development Council; The Hon. Mr Justice Gerard Hogan; and Professor Joseph McMahan, Dean, UCD Sutherland School of Law.



At the 1958/1959/1960 BComm reunion in October were (l-r): Laurence Crowley; Mícheál Ó Muircheartaigh; Professor Niamh Brennan, UCD School of Business; Feargal Quinn; and Professor Ciarán Ó hÓgartaigh, College Principal, UCD College of Business and Law.

Dr Oonagh Breen, UCD Sutherland School of Law, was elected to the Board of Directors of the International Society for Third Sector Research (ISTR). This society is a global membership association of scholars, researchers, and practitioners with the goal of keeping them abreast of changes and encouraging them to participate in a dialogue on matters related to civil society, philanthropy and the non-profit sector, otherwise known as Third Sector (after Government and Business).

Finally, I would like to thank all the members of UCD College of Business and Law, both staff and students, whose dedication and hard work have ensured an excellent performance and enhanced reputation during 2014/15, and I look forward to progressing our objectives and those of the University in the years ahead.

Professor Ciarán Ó hÓgartaigh
College Principal

Research Awards

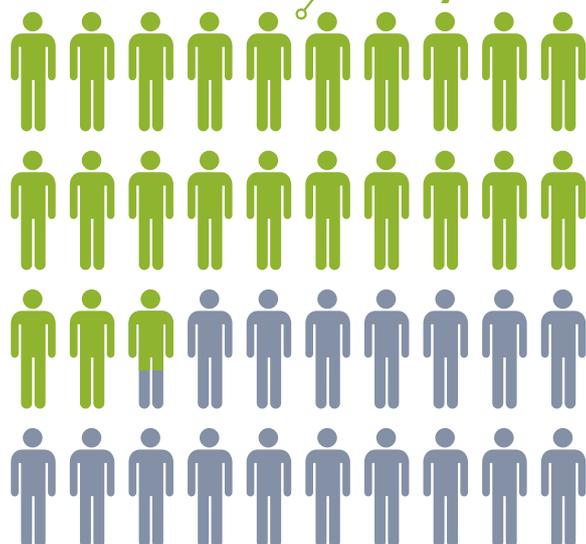
€3,800,000



* = 100 People Approx

UCD Students in Ireland

Undergraduate Students (FTE) 2,270



Graduate Students (FTE) 1,819



Total Students 4,089

Overseas Operations

Undergraduate Students (FTE) 4,183



Graduate Students (FTE) 322



Total Students 4,505



UCD Engineering Graduates Association (EGA) Gold Medal Winners. Pictured (l-r), front row: Joseph Thompson (Mechanical Engineering), Grace Brennan (mother of winner Karl Brennan) (Chemical Engineering), and Rhona Wade (Electronic Engineering). Back row (l-r): EGA President, PJ Rudden, Jason Hannon (Engineering with Business), Padraig McDonald (Biosystems Engineering), Éadaoin McLoughlin (Electrical Engineering), Mark Gilsenan (Civil Engineering), Thomas Gallagher (Mechanical Engineering - IMechE Project Prize), Peter Landy (Biomedical Engineering) and Principal of the College of Engineering, and Architecture Professor, David FitzPatrick.



Professor David FitzPatrick
College Principal/
Dean of Engineering

Dean of Architecture:
Professor Hugh Campbell

Associate Dean of
Architecture: Mr Dan
Sudhershnan

Vice-Principal for
Research and Innovation
and Graduate School
Director: Professor
Tony Fagan

I am delighted to report that a significant year for UCD School of Architecture was marked by Irish architects, Sheila O'Donnell and John Tuomey, being named as the 2015 recipients of the Royal Institute of British Architects (RIBA) Royal Gold Medal. Both Sheila and John are graduates of, and staff at, the School. The Gold Medal is the profession's most prestigious architecture award, presented to a person or group of people who have had a significant influence 'either directly or indirectly on the advancement of architecture'. All of the most influential and renowned architects of the last 160 years, from Frank Lloyd Wright to Frank Gehry, have received this award.

Research, Innovation and Impact

Over €20.6 million in new grants were registered by the College for the period of the Report. During this period, Professor Robert Bogdan Staszewski, recruited by UCD School of Electrical, Electronic and Communications Engineering, was awarded €5 million in funding under SFI's Research Professorship Programme. Professor Staszewski is leading a cutting-edge research programme to increase Ireland's capability as a global centre for the Internet of Things.

College faculty have also been awarded funding associated with new large scale national centres. Members of UCD School of Electrical, Electronic and Communications Engineering are partners in the SFI CONNECT Research Centre, and were awarded over €2 million in funding from SFI. Furthermore, members of UCD School of Biosystems Engineering, and UCD School of Mechanical and Materials Engineering, who are partners in the new Dairy Processing Technology Centre, an industry-academic collaborative research centre, were awarded over €1.8 million from Enterprise Ireland.

European Commission funding over a range of programmes represents 39% of the new grants registered during the period. This includes two Marie Skłodowska-Curie Innovative Training Networks (ITN), in which Dr Arturo Gonzalez, UCD School of Civil, Structural and Environmental Engineering, and Professor Michael Gilchrist with Dr Aisling Ni Annaigh, UCD School of Mechanical and Materials Engineering, were each awarded as coordinators for their respective ITNs.

In addition, the College was awarded a European Research Council (ERC) Consolidator grant and an ERC Proof of Concept grant. To date, the College hosts five ERC award holders including, most recently, Dr Madeleine Lowery, UCD School of Electrical, Electronic and Communications Engineering, for a project entitled *Multiscale Modelling of the Neuromuscular System for Closed Loop Deep Brain Stimulation*. In September, Ireland's most extensive, full service, commercial level 3D printing hub, 'U3D', was launched. This was an outcome of Professor Debra Laefer's



UCD School of Architecture student, Ekaterina Tikhoniouk (centre), receiving her Commendation in the RIBA President's Medals Dissertation category from RIBA Vice-President Education, Roz Barr (left), and RIBA President Stephen Hodder (right), at the President's Medals awards ceremony in London, December 2014. These medals are regarded as the most prestigious awards in architectural education globally.

Vice-Principal for Teaching and Learning:
Professor Colm O'Donnell

Vice-Principal for Internationalisation:
Dr Mark Richardson

UCD College of Engineering and Architecture consists of six schools:

UCD School of Architecture
Head of School/Dean
Professor Hugh Campbell

UCD School of Biosystems Engineering
Head of School
Professor Colm O'Donnell

UCD School of Chemical and Bioprocess Engineering
Head of School
Professor Eoin Casey

UCD School of Civil, Structural and Environmental Engineering
Head of School
Dr Mark Richardson

UCD School of Electrical, Electronic and Communications Engineering
Head of School
Professor Tom Brazil

UCD School of Mechanical and Materials Engineering
Head of School
Professor Michael Gilchrist

As of September 2014

ERC funded research in UCD School of Civil, Structural and Environmental Engineering, which developed mechanisms to auto-convert remote sensing technology, such as laser scanning, into watertight models appropriate for computational modelling. The same solutions were found to be cross-applicable for 3D printed models.

OxyMem, a UCD spin-out company from UCD School of Chemical and Bioprocess Engineering, and co-founded in 2013 by Professor Eoin Casey and Dr Eoin Syron, won two awards at the Intellectual Property (IP) Awards, in October. OxyMem, which is commercialising a breakthrough UCD technology to address the global need for a more energy efficient aeration solution for wastewater treatment, won the Overall Excellence in Intellectual Property Award, along with the Tech IP Award. Consequently, Professor

Casey and Dr Syron were presented with the Spin-Out Company Impact Award 2015 at the Knowledge Transfer Ireland 2015 Impact Awards in March.

NovoGrid, a new venture emerging from research carried out over several years in the Electricity Research Centre, at UCD School of Electrical, Electronic and Communications Engineering, was declared overall winner of the 2014 University College Dublin VentureLaunch Accelerator Programme. This prize was awarded to co-promoters, Dr Andrew Keane and Dr Peter Richardson, in recognition of the development of an intelligent control system to enable wind farm owners to reduce energy losses associated with the transfer of electricity to national grids, thereby assisting them to improve energy efficiencies and to increase revenues.



Architecture Graduates Association (AGA) Arup Gold Medal for Architecture winner, Sarah Doheny (centre), with Anne Lynch, representing the President of UCD Architecture Graduates Association, and Fergus Monaghan, Director at Arup.

Professor John Tuomey and Sheila O'Donnell, UCD School of Architecture, receive their RIBA Gold Medal.



Teaching and Learning

This year, our excellence in the field of Engineering education was recognised by Engineers Ireland. The UCD Bologna compliant ME Engineering programme development: Enhancing Design Thinking, Industry Engagement and Internationalisation, won the 2014 Best-in-Class award. The purpose of this prize is to highlight innovation in Irish engineering education that clearly demonstrates a real impact on the student community, coupled with an actual or future contribution to the economy. The application focused on the contribution of design thinking, industry engagement and internationalisation as core additional components over and above the development of core technical expertise.

Additionally, the Master of Engineering with Business programme was awarded the 2015 GradIreland Postgraduate Course of the Year in Engineering. This award, which is sponsored by the Higher Education Authority, is designed to acknowledge the best Irish postgraduate providers and recognises the scale and diversity of the impact the Master of Engineering with Business programme has had on both the student experience and its contribution to the Irish economy.

Internationalisation activity within the College continues to grow for both Architecture and Engineering, and Memoranda of Association were signed in the past year with Chang'an University, Wuhan University, and the Harbin Institute of Technology, China.



UCD Engineering recipients of the 2014 Women in Technology Scholarships, pictured (l-r) with EU Digital Girl of the Year, Lauren Boyle are: Ellen Le Bas, Brid Roberts, Catherine Galvin, and Fionnuala McCourt. The scholarship programme offers a monetary grant valued at €2,000 per academic year, as well as opportunities for work placements at the Intel Leixlip campus.

Alumni Engagement

UCD Engineering Graduates Association (EGA) events commenced with the award of sponsored EGA Gold Medals to final year students excelling in their disciplines. In late 2014, UCD EGA launched its well received *Gender Balance in Engineering* report, and hosted its annual Autumn Panel Discussion event, with an address from EU Commissioner Phil Hogan, on *Future Challenges to Food Production in Europe*. This was followed by a lively debate.

In May, the EGA welcomed UCD President, Professor Andrew Deeks, to deliver the Association's Spring Lecture on *Challenges for Engineering Education in the 21st Century*, to a record attendance. On the same day, President Deeks unveiled a plaque at NovaUCD celebrating 30 years since the opening of the University Industry Centre (UIC). The establishment of the UIC was an EGA initiative under the leadership of Professor John Kelly, then Dean of Engineering, and Dr Tom Hardiman, the Association's first president. The success of the University Industry Programme based in the UIC contributed to the setting up of NovaUCD in 2003, and established UCD as the leading university centre for new ventures and entrepreneurs.



Professor David FitzPatrick
Principal

Engineer Graduates Association (EGA) president, PJ Rudden (left), presents Professor Orla Feely, UCD Vice-President for Research, Innovation and Impact with the EGA Distinguished Graduate Award in May.



UCD Students in Ireland

Undergraduate Students (FTE) **1,033**



Graduate Students (FTE) **719**



Total Students **1,752**

Overseas Operations

Undergraduate Students (FTE) **156**



Graduate Students (FTE) **16**

Total Students **172**

*  = 100 People Approx

Research Awards

€20,600,000





The 2015 Clinical Commencement 'White Coat' ceremony took place in O'Reilly Hall, in January, when 311 students were officially presented with their white coats by faculty to mark their transition from preclinical to clinical medical education.



Professor Desmond Fitzgerald
College Principal

I am delighted as the outgoing Principal of UCD College of Health Sciences to have worked with the talented and committed staff of the College and its three schools: UCD School of Nursing, Midwifery and Health Systems; UCD School of Medicine and Medical Sciences; and UCD School of Public Health, Physiotherapy and Population Science. Health Sciences at UCD continues to attract Ireland's most accomplished school leavers and, through its graduates and research, to contribute to the effective and safe care of patients, to the wellbeing of the population and to the development of health and life science industries in Ireland.

Research and Innovation

All three Schools have built new programmes in the last few years, in clinical trials, data analytics, health systems and systems medicine. As a result, research funding has doubled. There are a number of awards that I would like to highlight, in particular those that emphasise individual research leadership and accomplishment. They include two €1.5 million Health Research Board (HRB) Research Leaders Awards 2015, to Professor Eilish McAuliffe, UCD School of Nursing, Midwifery and Health Systems, for a programme entitled *Collective Leadership and Safety Cultures (CO-LEAD)*, and to Professor Brian Caulfield, UCD School of Public Health, Physiotherapy and Population Science, for a project entitled *Technology supports for increased quality of care in joint arthroplasty*. In addition, the HRB awarded two of four Clinical Trial Networks to UCD academic clinicians. Professor Peter Kelly, UCD School of Medicine and Medical Sciences, and Mater Misericordiae University Hospital will lead the HRB Irish Stroke Clinical Trials Network, while Professor Alistair Nichol, UCD School of Medicine and Medical Sciences, and St Vincent's University Hospital will lead the HRB Irish Critical-Care Clinical Trials

Group. These multimillion Euro awards recognise the leadership of Professor Nichols and Professor Kelly in developing multi-disciplinary collaborative programmes in clinical research.

Two academics who are heading major research programmes in the College received highly prestigious Science Foundation Ireland (SFI) Principle Investigator Awards. Professor Martin Steinhoff, the Director of the UCD Charles Institute for Dermatology, received the award for his work on the mechanisms of itch, while Professor Walter Kolch, the Director of Systems Biology Ireland, received the award for his work on signalling pathways in cancer.

Research programmes are increasingly partnerships involving other HEIs and industry. For example, the €5 million Applied Research for Connected Health Centre (ARCH) was formally launched by Richard Bruton TD, Minister for Jobs, Enterprise and Innovation, in May. ARCH is a collaborative programme with the University of Limerick and a range of industry partners, led by Professor

Pictured (l-r) at the launch of the Applied Research for Connected Health (ARCH) Technology Centre are: Seamus Small, co-founder, Kinesis Health Technologies, a UCD spin-out company; Minister for Jobs, Enterprise and Innovation, Richard Bruton TD; and Michael O'Shea, ARCH Centre Director.



Brian Caulfield. In addition, several College researchers are engaged in multi-institutional collaborations funded by the EU Horizons 2020 programme, including CHES, which is a PhD training partnership also led by Professor Caulfield.

Education and Training

With over 4,000 students the College provides a wide range of undergraduate and postgraduate educational programmes, innovative training for healthcare professionals and opportunities for those pursuing research degrees. In addition to the programmes on the Belfield campus, UCD School of Medicine and Medical Sciences manages the Penang Medical College in Malaysia, part of our extensive international programme. Indeed, 31% of the School's students are from overseas, with 44 countries represented. As part of its growing international

programme, UCD School of Nursing, Midwifery and Health Systems welcomed 82 students and faculty from 13 universities across the United States. They came to participate in the Fifth Annual Nursing Summer School, delivered by a host of experts from across the Irish Health Service and UCD faculty.

Innovation in education has been a core theme of the College in recent years. In UCD School of Nursing, Midwifery and Health Systems, a multi-disciplinary community pharmacy placement for the Graduate Diploma in Diabetes Nursing received an award at the Irish Pharmacy Awards, in June. The School also established a new programme in Health Systems, which leads a leadership and management programme as part of the UCD Beacon Hospital Academy. A partnership has been developed in CPD with the Irish Nurses and Midwives Organisation (INMO) to provide recognition for the

UCD College of Health Sciences consists of three schools:

UCD School of Medicine and Medical Science

Head of School/Dean
Professor Patrick Murray

UCD School of Nursing, Midwifery and Health Systems

Head of School/Dean
Dr Martin McNamara

UCD School of Public Health, Physiotherapy and Population Science

Head of School/Dean of Public Health
Professor Giuseppe De Vito

Dean of Physiotherapy
Professor Brian Caulfield

As of September 2014

Pictured (l-r) at the announcement of €1.9 million funding, in a partnership with Pfizer and Professor Martin Steinhoff to develop a new therapy that targets the immune response, are: Dr William Finlay, Director of Global Biotherapeutics Technologies, Pfizer; Professor Martin Steinhoff, Director of UCD Charles Institute of Dermatology; Alfredo Sheehan, Pfizer; Minister for Skills, Research and Innovation, Damien English TD; and Professor Mark Ferguson, Director General of Science Foundation Ireland.



Professor Brian Caulfield, UCD School of Public Health, Physiotherapy and Population Science, pitching at the 2015 Google Wearables in Healthcare Pilot Challenge. Professor Caulfield won the Grand Prize because, according to the six judges from major Boston healthcare organisations, his idea was practical, simple and had the potential to reach many patients.



educational service provided by the INMO to over 60,000 nurses. The UCD Centre for Safety and Health at Work moved from providing satellite TV-distance education in Occupational Safety and Health, to blended online learning programmes. This brings UCD education directly into the homes and workplaces of its mature students. Similarly, UCD School of Medicine and Medical Sciences is building educational technology platforms to deliver distance and e-learning to our partner hospitals.

Wider Engagement

In June, UCD School of Nursing, Midwifery and Health Systems hosted Professor Jean Giddens, Dean of the School of Nursing, Virginia Commonwealth University, USA, who facilitated a two day workshop on a Concept Based Curriculum. The workshop proceedings were also streamed live to the school staff and to partner hospitals. With 30 years' experience, she is a recognised leader in nursing education, ranging from innovative models for teaching and learning to conceptual-based teaching applications, curricula and evaluation.

Pictured (l-r) at the launch of the UCD Beacon Hospital Academy, the new centre for educating and training healthcare students of medicine, nursing, physiotherapy and radiography, are: Professor Des Fitzgerald, Principal, UCD College of Health Sciences; Minister for Health, Leo Varadkar TD, and Michael Cullen, CEO and Chairman, Beacon Medical Group.



Health Partnerships

UCD works closely with a wide range of hospitals, community care organisations and government agencies in the education and training of healthcare professionals, and in our research programmes. Many of our academics work in the health service, holding joint or adjunct appointments particularly in our two major teaching hospitals, Mater Misericordiae University Hospital and St Vincent's University Hospital. This year saw the emergence of three new partnerships: the Ireland East Hospital Group (IEHG); the National Paediatric Hospitals Group; and the UCD Beacon Hospital Academy. The IEHG is the largest of six hospital groups established by the Irish Government, each with its own academic partner. The IEHG comprises 11 hospitals and oversees the care of 1.2m people. Professor Mary Day was appointed as Group CEO of the IEHG, and immediately set about establishing the group offices and executive, located in the Royal Hospital, Donnybrook. In another development, the Children's Hospital Group Board Academic Advisory Working Group was established to integrate paediatric research and education across the four Dublin health colleges (DCU, RCSI, TCD and UCD). Finally, the UCD Beacon Hospital Academy, launched in December 2014, will see its first intake of UCD students in September 2015. The Academy also initiated a Connected Health programme with Professor Brian Caulfield, which is developing remote care technologies for patients undergoing rehabilitation following hip or knee joint replacement.

College Developments

The College has worked closely with the hospitals to establish two initiatives designed to support the development of personalised medicine in cancer. In the first, a Next Generation Sequencing laboratory is being established in the UCD Conway Institute, under the direction of Professor Walter Kolch, which will enable whole genome sequencing in patients. In the second, the UCD-St Vincent's University Hospital (SVUH) Research Imaging Centre will provide a PET-CT service for patients. These initiatives are funded by the Programme for Research in Third Level Institutes and by funding from SVUH. In addition, the College, in partnership with Mater Misericordiae University Hospital (MMUH), began the development of the MMUH-UCD Academic Hub, including the Centre for Education and Training, on the MMUH campus. The Hub is part of an extensive redevelopment of the campus, which includes Ireland's newest and most advanced hospital. Several developments have been completed in the UCD Health Sciences Centre and the UCD Institute of Sport and Health, including the refurbishment of student areas and the provision of cross-schools AV and educational technology solutions.



Dearbhla Bourke, a BSc Physiotherapy student, received the Irish Society of Chartered Physiotherapists Research 2014 Prize from Minister of Health, Leo Varadkar TD (centre), and Dr Olive Lennon, UCD School of Public Health, Physiotherapy and Population Science.

UCD Students in Ireland

Next Steps

In September 2015, UCD College of Health Sciences will be amalgamated with UCD College of Agriculture, Food Science and Veterinary Medicine. This will create the new UCD College of Health and Agricultural Sciences, under the leadership of Professor Cecily Kelleher. In addition, the Office of the Vice-President for Health Affairs has been established under Professor Des Fitzgerald, to develop multi-disciplinary health programmes across the University and partnerships with hospitals, community health organisations and the health service.

A Tribute

Above all else however, I want to pay tribute to those students of UCD who died and were injured in Berkeley, California on 16 June 2015 and also to the students who went to their aid and undoubtedly prevented further deaths. In particular, we will always remember Lorcán Miller, Nicolai Schuster and Eimear Walsh who passed away on that day. Our thoughts and prayers are with them and their families.

Professor Des Fitzgerald, Principal

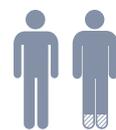
Pictured (l-r) at the launch of the Keep Control Campaign are: Professor Gerard Fealy, UCD School of Nursing, Midwifery and Health Systems; Minister of State at the Department of Health, Kathleen Lynch TD; Professor Mark Rogers, UCD Deputy President and Registrar; and Dr Deirdre O'Donnell, Principal Investigator, Keep Control project, UCD School of Nursing, Midwifery and Health Systems.



Undergraduate Students (FTE) **2,961**



Graduate Students (FTE) **1,219**



Total Students **4,180**

* = 100 People Approx

Research Awards

€18,100,000





Pictured at the June launch of the UCD Centre for Dewey Studies, during the 2015 Summer Institute in American Philosophy, in Newman House, are: Junguo Zhang, PhD student at UCD; Jiang Yi, Professor at Beijing Normal University; American Philosopher, Professor Joseph Zalman Margolis; Professor Maria Baghramian, UCD School of Philosophy; Liqing Zhang, China University of Political Science and Law, Beijing; and Qiong Zhao, a visiting student from Beijing Normal University.



Professor Colin Scott
College Principal

Vice-Principal for
Teaching and Learning:
Dr Eilis Hennessy*

Vice-Principal for
Research, Impact and
Innovation: Professor
Tony Fahey*

Vice-Principal for
Graduate Studies:
Dr Conor Galvin
(to 31 December 2014)
Dr Jessica Bramham
(from 1 January 2015)

Vice-Principal for
Internationalisation:
Dr Jos Elkin

**From October 2014*

It has been a great pleasure to work with the schools of UCD College of Human Sciences, and to learn more about how they: extend knowledge across the social sciences and cognate disciplines; deliver and develop innovative educational programmes; and engage with both students and users of their research and knowledge, in policy and practice communities. Understanding how much goes into the ambitious and well developed plans for enhancing research and education in the schools, I was very pleased to see the schools' achievements recognised in strong evaluations in the QS World University Rankings, by subject. UCD is ranked amongst the top 200 universities in the world for the social sciences, by both QS and the Academic Ranking of World Universities, and amongst the top 100 for a number of social science subjects.

Educational and Engagement

A particular highlight of our educational programmes each year is seeing our students graduate in conferring ceremonies held on campus, in September and December. Students from our College form a significant portion of the large cohort graduating from the BA degree, with single and joint majors. An equally significant but smaller cohort graduate with the Bachelor of Social Science Degree. Under the leadership of Professor Suzanne Quin, Dean of Social Science, this programme developed significantly in recent years by encouraging students to progress along specialist pathways, which assist them in mapping their study experience to future professional opportunities. We wish Professor Quin well in her retirement.

While many of our undergraduate students come to us from secondary school, some start through other routes, which may enable them to take an opportunity

that was not available when they completed their secondary education. A particularly important route into higher education is the Certificate and Diplomas in Drug and Alcohol work. This is offered by the UCD School of Applied Social Science, in cooperation with community partners Urrús, Ballymun and Merchants Quay Ireland. I was delighted to be able to attend the graduation event for these programmes, along with the UCD President, Professor Andrew Deeks, to learn more about the huge commitment shown by the students to their education, and to meet some of those who continued to complete the Bachelor of Social Science and graduate programmes in UCD. Equally, I was very pleased to be able to offer a welcome to students commencing the Equality Studies Certificate for Deaf People, offered jointly by UCD School of Social Justice and the Irish Deaf Society, and also the Certificate in Social Justice and Trade Union Studies, offered by the same school in cooperation with Trademark Belfast.

At the graduate level, our programmes are in high demand both with students from Ireland and an increasingly large cohort of students from overseas. I have been struck by the extent to which graduate education in the College equips students for rewarding careers, for example in education, social work, psychology and planning. I greatly enjoyed presenting diplomas to the last graduating class of the Professional Diploma in Education, the qualification for entry to the secondary school teaching profession, just as UCD School of Education welcomed its first students in the new Professional Master's in Education, a two year programme, which has become the new standard for entry to second level teaching.

A key challenge in the College has been to retain the strong disciplinary core in research and graduate education while, at the same time, adapting to educational needs in fields where no one discipline will fully support the required learning. Our newer interdisciplinary degrees, for example in Development Practice (offered jointly with TCD over a number of years) and Public Policy, meet these demands and are likely to grow in number in the future. Many of our schools have diversified their graduate offerings, reflecting change both in fields of study and in the world around us. International collaborations are also likely to be of increasing significance and it was a pleasure to see the President sign an agreement for collaboration, both in training and in graduate education, between the College, the UCD Geary Institute for Public

Policy, and the Harris School of Public Policy, University of Chicago, during a visit to the US, in April.

Research and Impact

Research in the College continues to be highly diverse. This ranges between empirical investigation of, for example, the effects of interventions in child development and healthcare, through to more theoretical concerns with the structure of social and economic relationships and the importance of ethics. International recognition for research achievement in the College comes in many forms. It was particularly pleasing to see colleagues leading in major international projects such as Elsevier's 25 volume *International Encyclopaedia of Social and Behavioral Sciences* (2nd edition), for which two colleagues served as section editors. A number of our faculty members contributed entries across a variety of disciplines to this monumental work. The future of the social sciences is very much dependent on the education and training of the next generation of researchers. The College has prioritised the recruitment and support of PhD students and post-doctoral researchers, supported by the Irish Research Council and by other funding agencies, with considerable success.

Our researchers are very active in engaging both with scholarly and policy and practice communities to develop their research projects and to engage on their findings.

Dean of Social Science:
Professor Suzanne Quinn

Dean of Arts: Professor
Muiris Ó Súilleabháin

UCD College of Human Sciences consists of ten schools:

UCD School of Applied Social Science

Head of School
Dr Michelle Norris

UCD School of Economics

Head of School
Professor Paul Devereux

UCD School of Education

Head of School
Professor Dympna Devine

UCD School of Geography, Planning and Environmental Policy

Head of School
Professor Mark Scott

UCD School of Information and Library Studies

Head of School
Dr Lee Komito

UCD School of Philosophy

Head of School
Professor Rowland Stout

UCD School of Politics and International Relations

Head of School
Professor Ben Tonra

UCD School of Psychology

Head of School
Professor Alan Carr

UCD School of Social Justice

Head of School
Ms Judy Walsh

UCD School of Sociology

Head of School
Dr Diane Payne

Pictured (l-r) at the Community Partnership Drugs programme conferring ceremony are: Brian Doyle, MSocSc Social Work student; Dr Mary Ellen McCann, former Programme Director; UCD President, Professor Andrew Deeks; and Professor Colin Scott, Principal, UCD College of Human Sciences.



Pictured (l-r) at a roundtable discussion on the Irish Public Sector in International Perspective, at the National University of Ireland, in January, are: Professor Edoardo Ongaro, Northumbria University, Newcastle; Professor Koen Verhoest, University of Antwerp; Robert Watt, Secretary General of the Department of Public Expenditure and Reform; Professor Philip O'Connell, Director, UCD Geary Institute for Public Policy; Dr Muiris MacCarthaigh, Queen's University Belfast; and Professor Niamh Hardiman, UCD School of Politics and International Relations, and Research Fellow at UCD Geary Institute for Public Policy.



Key research events during the year included: the Social Protection Workshop, hosted by the UCD Geary Institute of Public Policy, in September; the hosting by UCD School of Philosophy, of the Summer Institute of American Philosophy on *Reaches of Pragmatism*, in June; a workshop on Conscience, Conscientious Objection and Whistle Blowing, in October; a panel discussion on Conscience, in November (as part of the President's Ethics Initiative); a roundtable on the Irish Public Sector in International Perspective, in January; a conference on Responsibility for the Future; and a workshop on Leadership and Democracy, in June. All these events were organised by UCD School of Politics and International Relations. Completing the highlights for the year were: UCD School of Social Justice, which hosted the Graduate Conference on Challenging Injustice in Ireland, in October; UCD School of Applied Social Science, which, in cooperation with the University of Tokyo, organised the Ireland Japan Social Science Symposium, in September; and UCD School of Geography, Planning and Environmental Policy, which hosted the Annual Conference of the International Geographical Union Urban Commission, in August.

Conclusion

As the year came to an end, the College began to implement an agreed restructuring as part of the UCD Strategy 2015-20, such that it will start next year as UCD College of Social Sciences and Law. The new College will have unusually comprehensive coverage across the social sciences and cognate disciplines. The College will also be in a good position to serve society even better with enhanced opportunities for interdisciplinary learning and research, building on the strengths of its core disciplines. In this, and in all other matters, the commitment, engagement and collegiality of my colleagues in the College Office, the College Vice-Principals and in the schools has been central both to the rewarding character of my office and the strong achievements of the College and its schools.

Professor Colin Scott
Principal



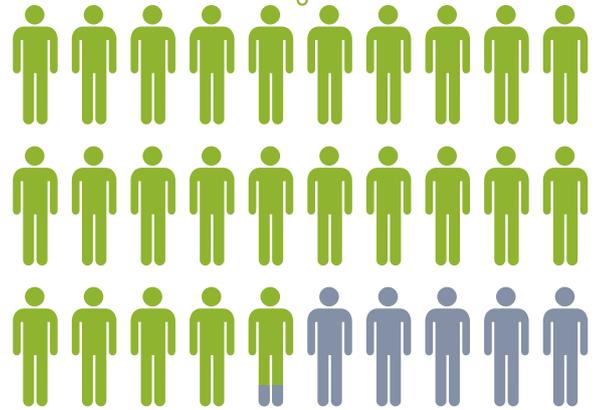
*Pictured (l-r) at the launch of the study *Sexual Trauma and Abuse, Restorative and Transformative Possibilities?* in December are Dr Marie Keenan, UCD School of Applied Social Science, Principal Investigator on the report and Bernadette Fahy, Research Consultant and co-investigator.*



Pictured (l-r) are speakers and organisers at the one day workshop on Leadership and Democracy, hosted by UCD School of Politics and International Relations in June: John William Devine, King's College London; Cara Nine, University College Cork; David Archard, Queen's University Belfast; Iselt Honohan, UCD School of Politics and International Relations; and Richard Bellamy, European University Institute/University College London.

UCD Students in Ireland

Undergraduate Students (FTE) **2,483**



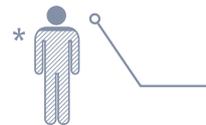
Graduate Students (FTE) **1,247**



Total Students **3,730**

Overseas Operations

Graduate / Total Students (FTE) **24**



*  = 100 People Approx

Research Awards

€2,400,000



Pictured (l-r) are participants at the second Ireland-Japan Social Science Symposium, held at the Chester Beatty Library and organised by UCD and the University of Tokyo: Dr Naonori Kodate, UCD; Professor Jane Grimson, TCD; Professor Michelle D'Arcy, TCD; Professor Junko Kato, University of Tokyo; Dr Sebastian Dellepiane, Strathclyde University; Dr Michelle Norris, UCD; Professor Nobuhiro Hiwatari, University of Tokyo; Dr Tom P. Hardiman, Chairperson, Chester Beatty Library; Professor Niamh Hardiman, UCD; Japanese Ambassador, H.E. Chihiro Atsumi; UCD President, Professor Andrew Deeks; Professor Tony Fahey, UCD; Professor Shin Ushiro, Kyushu University; Professor Colin Scott, Principal, UCD College of Human Sciences; and Dr Chiaki Sato, University of Tokyo.





Pictured (l-r) at the announcement of over €30 million of research funding for 23 major research projects, through the Science Foundation Ireland (SFI) Investigators Programme, are: Professor Fiona Doohan, UCD; Minister for Skills, Research and Innovation, Damien English TD; and Professor Mark Ferguson, Director General, SFI. Professor Doohan received €1.7 million to identify disease resistance breeding targets to enhance the sustainability of cereal production and the security of food supply.



Professor Joe Carthy
College
Principal/Dean

I am pleased to report that UCD College of Science continued to deliver excellence in teaching, research and contribution to the community in the year 2014/15.

Research and Impact

The UCD led Irish Centre for Research in Applied Geosciences (iCRAG) was established in 2014, with €18 million from Science Foundation Ireland (SFI) and €8 million from industry, in response to Ireland's resource security problem. iCRAG Director, Professor John Walsh, UCD, joined the *Scientist-Minister pairing scheme*, teaming up with Minister Joe McHugh to brief elected representatives on the world-class research that is currently taking place in Ireland.

The Minister of State at the Departments of Education and Skills, and Jobs, Enterprise and Innovation, Damien English TD, recognised Professor Barry Smyth, UCD School of Computer Science and Informatics, an international expert on personalisation technologies and recommender systems, by presenting him with the SFI Researcher of the Year 2014 award.

The recently concluded Smart Coasts project, led by Aberystwyth University (Wales), in close collaboration with partners in UCD, including Professor Wim Meijer, UCD School of Biomolecular and Biomedical Sciences, and colleagues, developed a new system providing real-time water quality information for bathers in line with

European bathing water standards. This project has the potential to boost tourism and support local economies in participating regions.

Aimed at informing experts and practitioners alike, *Marine Ecosystems: Human Impacts on Biodiversity, Functioning and Services* (Cambridge University Press) was co-edited and co-authored by Dr Tasman Crowe, UCD School of Biology and Environmental Science.

Researchers Professor Frederic Dias, Sarah Gallagher and Roxana Tiron, UCD School of Mathematical Sciences, jointly with Met Éireann, created a high resolution wind and wave atlas for the period 2000-2012, covering both the Atlantic and the Irish Sea coasts with a focus on the nearshore areas. This atlas will help Ireland to quantify and make best use of its unique conditions of ocean renewable energy resources and, in addition, inform many other marine activities.

Radio and television are valuable for sharing UCD science with the public and achieving impact through informing debate. Over the past year scientists in the College made contributions to media programmes, including *Eco Eye*, featuring interviews with Professor Fiona Doohan and

Director of Graduate
School: Dr Mary
Kelly-Quinn

Vice-Principal for Teaching
and Learning: Dr Carmel
Hensey

Vice-Principal for Research
and Innovation: Professor
Martin Albrecht

Professor Wim Meijer, and *Prime Time*, where analysts from UCD Centre for Cybersecurity and Cybercrime Investigation showed members of the general public how much of their (private) life is available online and what criminals can do with their information.

Students and Young Researchers

Our undergraduate programmes continued their strong performance with the highest number of CAO first preferences nationally and increasing international demand. I am pleased to note that 20% of the undergraduate cohort is from non-traditional backgrounds in line with UCD objectives.

Our Study Abroad Programme and the Introduction to Scientific Research module went from strength to strength, with the number of interested partner universities increasing each year. I would like to thank Dr Tadhg Ó'Cróinín, Associate Dean for Study Abroad, Ms Annette Forde, Programme Office Director, and all participating science academics for supporting this initiative which makes UCD Science known in major global universities.

Professor Jeremy Simpson, Vice-Principal (International), and colleagues had another busy year of international travel promoting our taught masters and undergraduate

programmes. Due to their efforts UCD Science is in a strong position internationally with a healthy increase in student numbers.

In 2014/15, UCD Science appointed Ms Edel Caraway as Programme Internship Manager, to look after internships for our taught masters students. This initiative was very successful, in terms of student experience and positive feedback from participating companies.

I am delighted to report that our students and young researchers continue to excel: PhD students, Andrew Smith, UCD School of Biomolecular and Biomedical Science, and Brian Caffrey, UCD School of Chemistry, were the first UCD graduates to receive Wellcome Trust-NIH scholarships; Dr Triona Ni Chonghaile, Research Fellow working with Professor Liam Gallagher, UCD School of Biomolecular and Biomedical Science, received a distinguished L'Oreal and Unesco for Women in Science fellowship; Matthew Coleman, a final year chemistry student, scooped first prize in a video competition run by The Royal Society of Chemistry; Conor O'Toole, MSc in Space Science and Technology, was selected competitively for a placement at the NASA Internship Programme; and Dr Mariana Bexiga, UCD School of Biology and Environmental Science, was one of only six Irish researchers selected in an international competition to meet with 66 Nobel Laureates in Lindau, Germany.

Associate Dean of Science: Dr Tasman Crowe

Associate Dean for International Study: Professor Jeremy Simpson

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

Associate Dean for Widening Participation: Dr 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
Dr Keith Murphy

UCD School of Chemistry and Chemical Biology

Head of School
Professor Gareth Redmond

UCD School of Computer Science and Informatics

Head of School
Professor Pádraig Cunningham

UCD School of Geological Sciences

Head of School
Professor Stephen Daly

UCD School of Mathematical Sciences

Head of School
Professor Gary McGuire

UCD School of Physics

Head of School
Professor Pádraig Dunne

Students utilising some of the collaborative spaces in the UCD O'Brien Centre for Science.



Pictured (l-r) at the inaugural O'Brien Science lecture *0.5% the margin between good and great, and how to find it* are: Denis O'Brien, businessman and philanthropist; David Epstein, author of *The Sports Gene*; and UCD President, Professor Andrew Deeks.



Linking UCD Science with Society

At Maths Sparks 2015, a four week long series of problem solving workshops, students from six secondary schools explored a wide range of topics from graph theory to game theory. Students were introduced to the applications of mathematics in areas such as cryptography and computer science.

Our Science for Schools Programme, hosted by Professor Emma Teeling in her Bat Lab during 2013/14, was designed to bring the enthusiasm of university research to Irish secondary schools; in 2014/15, she developed a successful follow-on video competition for school students. The goal was to use video as a mechanism to engage young people with concepts

like genetics and ecology. The competition was very well received and succeeded in opening science up to the younger generation.

UCD Science's engagement with alumni built on efforts undertaken the previous year, with a 150% increase in the number of alumni attending events this year.

Our flagship science engagement event in May 2015 was *Light & Shadow*, where we invited our alumni and their families, and also the general public. *Light & Shadow* featured a family-friendly programme with science-themed contributions to suit all ages. We received very positive feedback from alumni, donors and the public, and it was gratifying to see the enthusiasm with which our community offered to contribute to this event.

UCD honoured six outstanding academics at our June Bloomsday Conferring, whose scientific endeavours have made extraordinary contributions to society, not just in Ireland, but worldwide. UCD Honorary Degrees of Doctors of Science were awarded to: Dr John Brown, Emeritus Lecturer in Organic Chemistry at the University of Oxford; Professor Margaret Murnane, the University of Colorado, Boulder; Dervilla Donnelly, Emeritus Professor of Organic Chemistry at UCD; UCD graduate John Hearn, Emeritus Professor of Reproductive Physiology at the University of Sydney; and Julie McEnery, Adjunct Professor of Physics at the University of Maryland. The UCD Ulysses Medal, the highest honour the University can bestow, was awarded to Professor Diana Harrison Wall, distinguished Professor of Biology, at Colorado State University.



On Bloomsday 2015, UCD honoured Professor Diana Harrison Wall with its highest honour, the Ulysses Medal, in recognition of her outstanding contribution to science. Pictured with Professor Joe Carthy, Principal UCD College of Science.



Participants in the Fifth International Conference of Fire Effects on Soil Properties, hosted in UCD in July, organised by Dr Jonathan Yearsley, UCD School of Biology and Environmental Science.

Entrepreneurial UCD Science Activities

Parameter Space Ltd, a new UCD spin-out company founded by Professor Lorraine Hanlon and Dr Sheila McBreen, UCD School of Physics, secured an €800,000 contract from the European Space Agency (ESA). The project will develop new software capable of exploiting the unprecedented volume of data returning to Earth from ESA's Gaia satellite. The contract will also enable the company to employ four graduates.

I would like to take this opportunity to thank the faculty and staff in the College for their ongoing hard work and commitment to UCD Science.

Paul Lavin, PhD student in Dr Margaret McGee's Cancer Biology Group, UCD School of Biomolecular and Biomedical Science, and winner of ENGAGE 2015: Cutting Edge Science, Plain English for his presentation 'Flip' Off Cancer, is presented with his award by Dr Barbara Dooley, UCD Dean of Graduate Studies.

Professor Joe Carthy
Principal



UCD Students in Ireland

Undergraduate Students (FTE)

2,660



Graduate Students (FTE)

1,379



Total Students

4,039

Overseas Operations

Undergraduate / Total Students (FTE)



543

* = 100 People Approx

Research Awards

€37,600,000





Design proposals for the Ulysses Centre at Newman House.



Gerry O'Brien
Bursar

2014/15 saw the continuation of progress achieved by the University in recent years with a surplus of €0.45 million, generated on its HEA core-funded activities. This is despite a number of financial challenges that remain on the horizon, most notably the uncertainties around government recurrent funding.

Reduction in State Funding

The single biggest financial challenge facing the University in the current economic environment remains the sustainability of operations. Since 2007/08, the sector has suffered reduced State funding in each successive year and these cuts continued into the current year. However, UCD managed to meet its strategic objectives and to stay within its annual budget, although concerns about long-term financial sustainability remain if under-funding of the sector continues and the need for ongoing investment in infrastructure is not addressed.

UCD's recurrent State grant funding for 2015 was 7% less than the 2014 equivalent. This reduction included the impact of an overall 1% funding reduction for the sector in 2015, as announced in the 2012 Exchequer Budget, and the substitution of funds relating to the increase in student contribution from €2,750 per eligible undergraduate student in 2014/15, to €3,000 in 2015/16.

The 2012 Exchequer Budget announcement regarding higher education funding reductions covered the period from 2012 to the end of 2015. Based on indications from the Spring Economic Statement 2015, and the recent

National Economic Dialogue, we are optimistic that overall Exchequer funding levels will stabilise from 2016 onwards. However, this must be viewed against the background of a projected increase in demand for full-time higher education of at least 15% between 2015 and 2025.

A continued lack of timely and multi-annual information in relation to State funding adversely affects the University's ability to prepare annual budgets and multi-annual plans. However, as the recurrent Exchequer grant now represents a lower percentage of total University income, the impact of this uncertainty has diminished.

In 2014, the Minister for Education and Skills established the Expert Group on Future Funding for Higher Education, in order to identify and consider the issues relating to the long-term sustainable funding of Higher Education in Ireland, and to identify options for change. This group is due to issue its full report by 31 December 2015. One of the six distinct modules to be examined, *Long Term Funding*, will assess the long-term funding requirements of the sector, and provide a set of funding options for the Minister for Education and Skills to consider. This

may eventually lead to more clarity regarding government policy for funding higher education.

Further Development of HEA Funding Models

The HEA announced 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 revised funding model is also likely to take account of the report of the Expert Group and to include an overall performance funding mechanism.

New Income Initiatives and Incentives

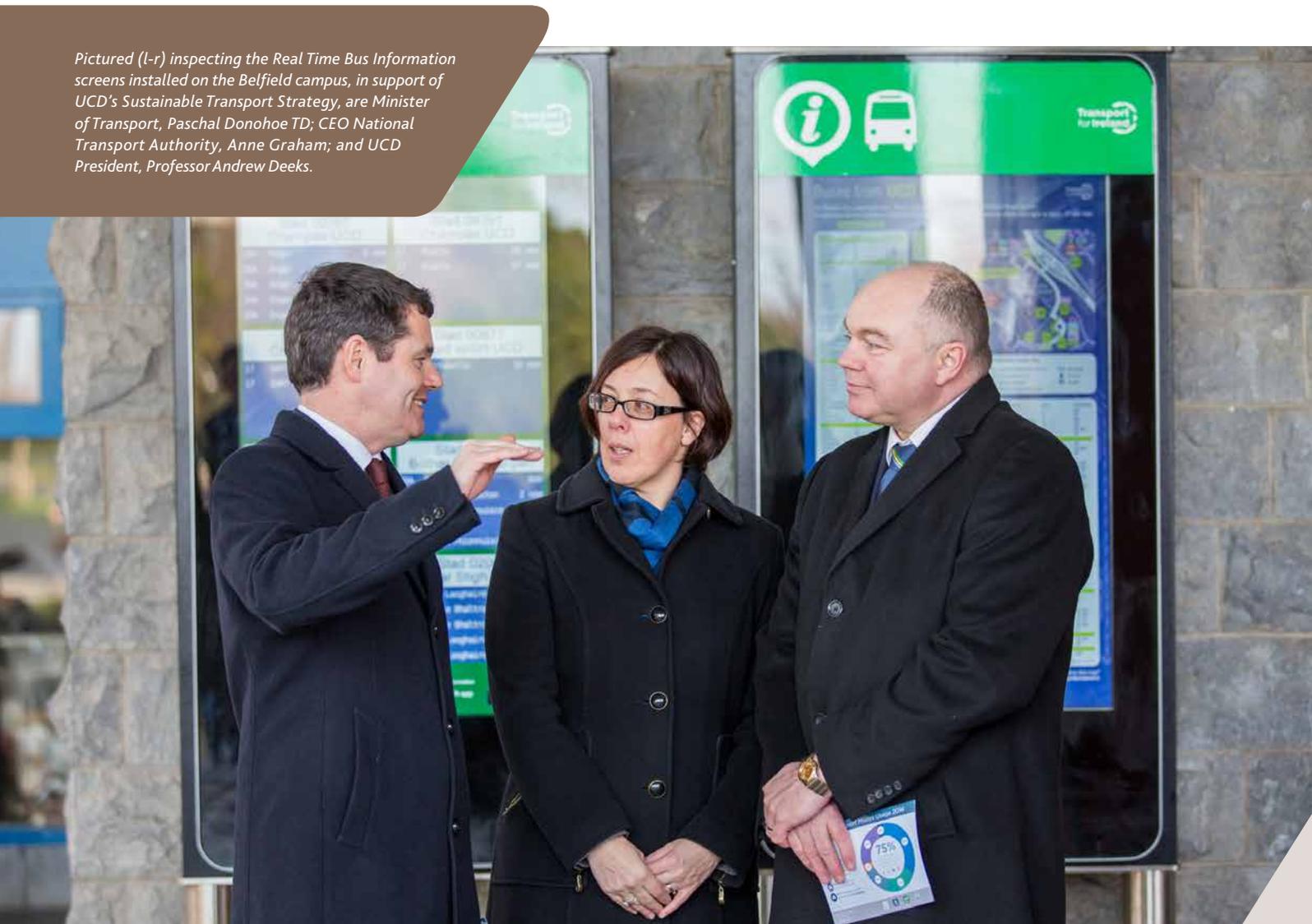
Consistent with its global mission to reduce dependency on Exchequer funding and to mitigate the impact of Exchequer funding reductions, the University has continued to increase its investment in international student recruitment, particularly in South East Asia. Intake of graduate students to campus-based and new online programmes has also grown significantly, and efforts to enhance commercial activity are on-going. These initiatives have helped UCD to sustain and, where possible, improve existing academic and support services for students.

The Bursar's Office is assisting individual colleges and schools to develop five year financial plans, which broadly align with the strategic objectives of the University, and provide a multi-annual view of each unit's planned activities and resource requirements. The internal budget model has been adapted to include formulaic incentives which encourage schools to generate additional student fee income from a number of sources, such as international and EU graduate students in 2014/15. From 2015/16 onwards, this incentive is being extended to include EU undergraduate students, to enable UCD to achieve its financial targets. The introduction of the formulaic performance-based funding for schools provides clearer and more direct linkage between the income of a school and its expenditure budget.

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

The timetable for preparing the University Budget 2015/16 was brought forward, with the budget approved in June 2015 in order to facilitate units to plan resources for the coming academic year in a timely manner. This represents a significant improvement from previous years. The budget was prepared in parallel with academic units' five year strategies and as part

Pictured (l-r) inspecting the Real Time Bus Information screens installed on the Belfield campus, in support of UCD's Sustainable Transport Strategy, are Minister of Transport, Paschal Donohoe TD; CEO National Transport Authority, Anne Graham; and UCD President, Professor Andrew Deeks.





of their initial five year financial plans. While the five year financial plans indicate the 'direction of travel' for units, there will be refinements as school strategies are finalised and as Support Units develop their strategies.

New Systems Development

To support the development of the schools' five year financial plans, the Bursar's Office introduced a Head of School Planning Tool. This tool implements the formulaic performance-based funding model and enables a Head of School to model different options, whether income or expenditure, and project the financial impact on the school. The options can be considered in isolation or in combination, and can be modelled on a stand-alone basis or integrated with the full set of financial data for the school. Heads of School may work in conjunction with their Finance Manager to use the tool, or work independently with support from the Finance Manager.

It is planned to review the use of this tool in 2015/16, and enhance the mechanism where possible.

New technology, which was introduced last year to enable some of our larger suppliers to view their own accounts online and to make real-time enquiries on the status of their invoices and pending payments, was extended to a broader range of suppliers during the year. Feedback from these suppliers has been positive, which in turn has led to a reduced level of queries.

Procurement

The last two years have seen a significant transformation in public sector procurement practices. The Office of Government Procurement was established in July 2013, with a view to managing all strategic spend for common purchases by public sector bodies, including the universities.

While the UCD Procurement Office is actively working with the Office of Government Procurement (OGP) to ensure that procurement activities in UCD are aligned with the objectives of the OGP, the UCD Procurement Office continues to run tenders on behalf of the University, and provides support and training to staff across the University.



The Summer at UCD office hosted a Bloomsday Breakfast on 16th June, for US study abroad students staying in UCD residences.

There was also a wider implementation during the year of the centralised online purchasing system with trained buyers. The aim is to enhance the coordination of buyer activity across the University and to maintain a high level of compliance with government procurement policies.

Increase in Non-State Funding

The University continued to focus on alternative non-Exchequer sources of funding during the year, in order to maintain a financially stable and viable position.

This year saw another significant increase in international student recruitment and the work of the Global Engagement Group has led to the establishment of student recruitment centres in different countries, particularly in South-East Asia.

Revenue streams from summer activities on campus and earnings from catering concessions also continued to grow during the year. The Summer at UCD office saw further growth in study abroad tours from the US, along with a very successful internship accommodation programme.

Campus Development New Projects

Philanthropy funding was awarded to support a game-changing investment in a transformative UCD College of Business learning and student experience. The new experimental spaces on the Belfield campus will create dynamic opportunities to learn outside the traditional comfort zone, encouraging the development of informed, critical and agile thinkers. The procurement of a design team commenced for the new building which will draw on and enhance the international reputation and reach of the University.

In order to support the new academic structures to be introduced in September 2015, a Newman Building co-location strategy was developed resulting in the relocation of faculty and staff across almost 150 rooms during the summer. This initiative challenged the University to reimagine the use of existing buildings and to develop opportunities which respond to changing School requirements and the new UCD Strategic Plan. The benefits are significant in terms of strengthening the disciplines, reinforcing the school identity and supporting more efficient use of human, financial and physical resources.

Site clearance and utility diversion works for the new UCD Confucius Institute for Ireland commenced. Occupation of the new building is planned for early 2017. These new world-class facilities will support UCD's objective to further build national and international engagement.

The development of the Ulysses Centre at Newman House will provide a major literary visitor attraction, which will include the creation of an immersive exhibition in the Aula Maxima, while also allowing for smaller exhibitions. The authenticity of the Georgian houses combined with UCD's literary content and scholarship will generate collaboration and partnership across the wider academic and cultural community. Design development was initiated and it is expected that the formal planning application will be submitted in late 2015.

Works to establish a new Writing Centre and training facilities began on the first floor of the UCD James Joyce Library. The goal is to foster information skills development, with flexible spaces providing a range of study and active learning spaces. Facilities will be positioned alongside centralised student facing support services in highly visible, central and accessible locations. Refurbishment of the ground floor of the Tierney Building generated a new bright and attractive University Student Desk hub, which is designed to enhance the student service interface.

A preliminary feasibility study for the proposed University Club, as part of the potential redevelopment of O'Reilly Hall, commenced. The proposed University Club will be developed to provide staff, members, corporate clients and the community with a unique social engagement setting, and high quality café and restaurant facilities. It will be complemented by existing conference and event facilities.

The update of the campus development plan commenced and will consider the new UCD Strategic Plan, current capacity and potential projects which may be realised over the next five to ten years. In addition to ongoing classroom refurbishments, the development of enhanced accessibility and landscape features, such as the woodland walks, continue to promote public engagement and wider participation in University life. Formation of a Green Campus Committee led by UCD students has commenced.

In support of UCD's sustainable commuting policy and in addition to the subsidised shuttle bus from Belfield to Sydney Parade, UCD initiated plans for the introduction of a free shuttle bus to Windy Arbour on the LUAS Green Line. This will form part of a trial initiative to encourage greater use of public transport and enhance access to residential areas located along the LUAS line. More bike stands with improved design for secure parking, shower facilities and bike lockers have also been provided on campus.

There has been a series of meetings with the local planning and transport authorities regarding campus commuting matters. Preparation for the introduction of parking demand management initiatives was undertaken across the campus.

Residences

A new allocation policy for campus student residences was developed, giving priority to first year, international and scholarship students. The new policy is designed to enhance accessibility and student retention while also providing focused support for vulnerable students.

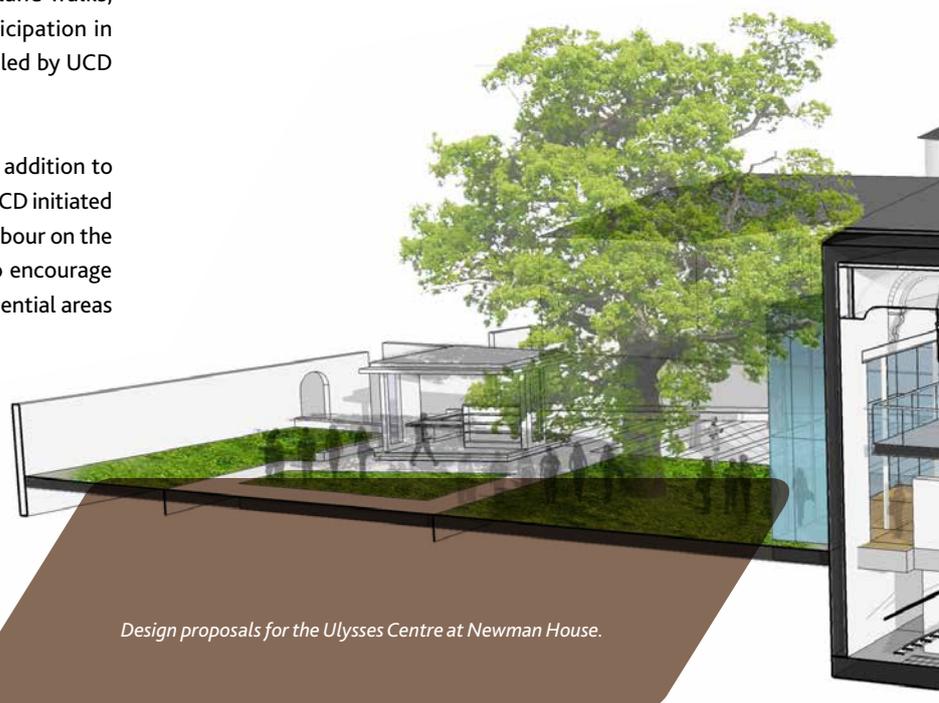
The construction of the new student residence beside Belgrove advanced to the roof level. It is envisaged that the 354 bed residence will be operational by September 2016. A design team was appointed to prepare a residence masterplan which may incorporate the development of up to 2,000 additional bedrooms and associated amenity spaces over the next five to ten years.

Energy

UCD has made good progress towards achieving ambitious public sector 2020 energy efficiency targets. To date, the University has improved its energy efficiency by 19.5% when compared to the 2006 baseline year. This excellent progress has been achieved through a series of targeted initiatives covering operational activities and management processes, as well as engineering upgrade projects. Students and staff have also played an important part, including raising awareness and engaging in the 'switch-off' initiative for holiday periods.

The University has commenced work towards the implementation of the international energy management standard ISO50001, a system based on continual improvement.

A practice of replacing lighting which has reached end of life with energy efficient LED lighting has been established. This will lead to a gradual but significant reduction in electricity consumption, improvements in light quality and reduced maintenance costs. In addition to the recently constructed buildings, older buildings which now feature partial LED lighting include the UCD James Joyce Library, Newman, Richview and the Agriculture and Food Science Centre Buildings.



Design proposals for the Ulysses Centre at Newman House.

Other 2015 energy-related projects included boiler, window, heating, smart building controls and fabric upgrades across a number of Belfield and Blackrock buildings. As with all new developments and major renovations, the construction of the new student residences beside Belgrove incorporates key sustainability features such as high levels of thermal insulation, green roofs as well as solar PV (Photo-voltaic) panels which will produce electricity.



Gerry O'Brien
Bursar

UCD Energy Use

	2012 / 2013	2013 / 2014	2014 / 2015
Total Area m ²	297,565	314,400	314,400
Electricity kWh	27,296,800	26,304,456	24,495,179
Gas kWh	70,706,905	70,970,958	66,771,867
Total Energy kWh	98,003,705	97,275,414	91,267,046
kWh Use per m ²	329	309	290

↓ 39 kWh use per m²

Decrease in 2014/15 compared to 2012/13

Note: The energy use and space excludes student residence accommodation.



Ulysses Medal



Professor Stephen L. Buchwald

12 December 2014, in recognition of his outstanding global contribution to the field of chemistry.

University Awards



Diana Harrison Wall

16 June 2015, in recognition of her work in raising the awareness of the importance of soil biology.

UCD Foundation Day Alumni Awardees - 14 November 2014



UCD 2014 Foundation Day Medal

Jonathan Sexton in recognition of his outstanding achievements, leadership and success in provincial and national rugby.



2014 UCD Alumni Award in Agriculture and Food Science

Mairead McGuinness, MEP, in recognition of her dedication and commitment to European agriculture development.



2014 UCD Alumni Award in Architecture

David McNulty, Director of Architecture, Louis Vuitton, in recognition of his outstanding creative contribution to architectural design.

UCD Foundation Day Alumni Awardees - 14 November 2014



2014 UCD Alumni Award in Arts

Rosaleen Linehan, actress, in recognition of her outstanding success over 50 years on stage and screen.



2014 UCD Alumni Award in Business

Gary McGann, Group Chief Executive Officer, Smurfit Kappa Group, in recognition of his leadership and success in the business world.



2014 UCD Alumni Award in Engineering

Donal O'Riain, founder and managing director, Ecocem, in recognition of his outstanding entrepreneurial achievements in carbon-neutral construction.



2014 UCD Alumni Award in Social Science

Sr Stanislaus Kennedy, a social innovator and founder of Focus Ireland and the Sanctuary, in recognition of her longstanding commitment to improving the lives of the under privileged in Irish society.



2014 UCD Alumni Award in Law

Maeve O'Rourke, barrister, in recognition of her outstanding humanitarian work securing justice for the victims of the Magdalene Laundries.



2014 UCD Alumni Award in Medicine

Dr Patricia Scanlan, Consultant Paediatric Oncologist, in recognition of her work within the paediatric cancer treatment revolution in Tanzania.

UCD Foundation Day Alumni Awardees - 14 November 2014



2014 Alumni Award in Nursing

Dr Siobhan O'Halloran, Chief Nursing Officer, Department of Health, in recognition of her longstanding commitment to nursing and the Health Service in Ireland.



2014 Alumni Award in Physiotherapy

Clodagh Barry, Physiotherapist, Central Remedial Clinic, in recognition of her continuous dedication to working with paediatric Spina Bifida in Ireland, Lebanon and Pakistan.



2014 Alumni Award in Science

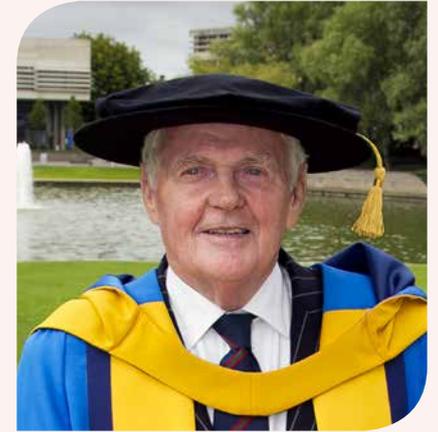
Evelyn Cusack, Deputy Head of Forecasting, Met Éireann, in recognition of her leadership in meteorology in Ireland.



2014 Alumni Award in Veterinary Medicine

Noel Fitzpatrick, veterinary surgeon, in recognition of his revolutionary work in the treatment of small animals including his cutting-edge surgery techniques.

Honorary Degrees



Liam Connellan

1 September 2014. Distinction in Engineering and outstanding contribution to the development of industry and policy in Ireland and in the EU - Honorary Degree of Doctor of Science.



Fergal Shanahan

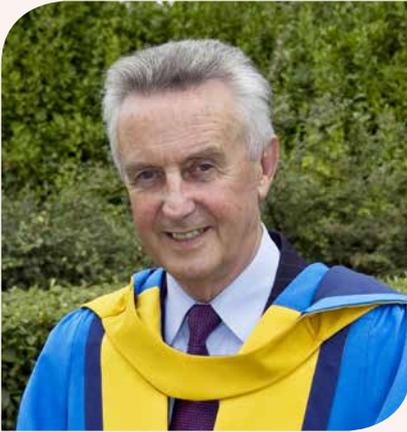
8 June 2015. Distinction in Medicine, for his unique work on the human intestinal bioflora, intestinal immunology and mechanisms of inflammatory bowel disease - Honorary Degree of Doctor of Science.



Julie McEnery

16 June 2015. Distinction in Science, an outstanding astrophysicist who has achieved international acclaim for her leadership role in NASA - Honorary Degree of Doctor of Science.

Honorary Degrees



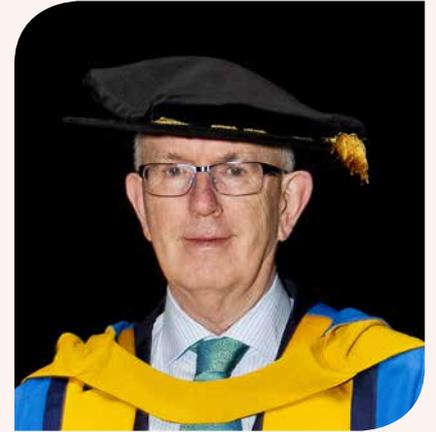
Jim Bolger

1 September 2014. World leading Irish racehorse trainer and breeder and for his contribution to the scientific research programmes - Honorary Degree of Doctor of Science.



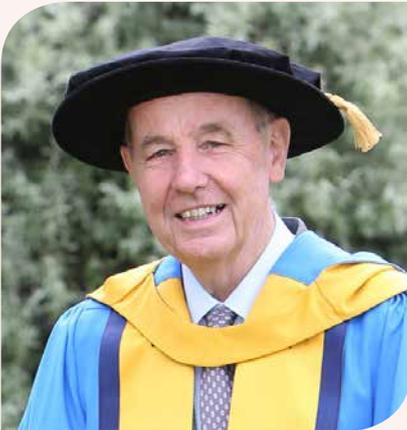
Deborah Howard

1 December 2014. Distinction in the Arts, more particularly as an architectural historian - Honorary Degree of Doctor of Literature.



Barry O'Leary

4 December 2014. Distinction in public service through his term as CEO of IDA Ireland in challenging economic circumstances - Honorary Degree of Doctor of Laws.



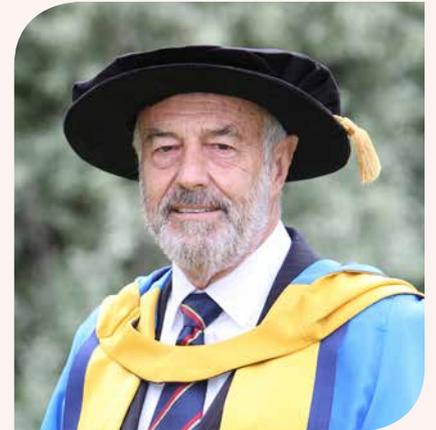
John M. Brown

16 June 2015. Distinction in Chemistry, specialist in the field of mechanism in asymmetric catalysis - Honorary Degree of Doctor of Science.



Dervilla M.X. Donnelly

16 June 2015. Distinction in Science and contribution to society - Honorary Degree of Doctor of Science.



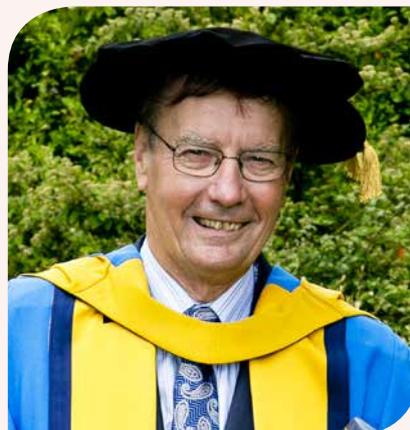
John Hearn

16 June 2015. Distinction in Science with worldwide acclaim in the area of reproductive biology - Honorary Degree of Doctor of Science.



Margaret Murnane

16 June 2015. Distinction in Physics and a world leader in the area of ultra-fast lasers and attosecond Physics - Honorary Degree of Doctor of Science.



Stanley Wayne Martin

17 June 2015. Distinction in Veterinary Medicine especially in veterinary epidemiology - Honorary Degree Doctor of Science.



Owen Brennan

31 August 2015. Distinction in Business - Honorary Degree Doctor of Science.



Appointments

New Appointments

The list below sets out the academic appointments in the period 1 September 2014 to 31 August 2015, to positions of Associate Professor and Professor, and includes both new recruits to UCD and UCD staff promoted.

Professor Appointments

Professor Jim Campbell	UCD School of Applied Social Science
Professor Gerard Fealy	UCD School of Nursing, Midwifery and Healthy Systems
Professor John Flood	UCD Sutherland School of Law
Professor Eilish McAuliffe	UCD School of Nursing, Midwifery and Healthy Systems
Professor Robert Shorten	UCD School of Electrical, Electronic and Communications Engineering
Professor Karen Sonpar	UCD School of Business
Professor Robert Staszewski	UCD School of Electrical, Electronic and Communications Engineering

Professor Promotions

Professor Nial Friel	UCD School of Mathematical Sciences
Professor Lorraine Hanlon	UCD School of Physics
Professor Thomas Brendan Murphy	UCD School of Mathematical Sciences
Professor Colm O'Donnell	UCD School of Biosystems Engineering

Associate Professor Appointments

Professor Eamonn Gormley	UCD School of Veterinary Medicine
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Associate Professor Promotions

Professor Lorraine Brennan	UCD School of Agriculture and Food Science
Professor Madeleine Lowery	UCD School of Electrical, Electronic and Communications Engineering





University College Dublin

Belfield, Dublin 4, Ireland.

www.ucd.ie