



University College Dublin

REPORT OF THE PRESIDENT
SEPTEMBER 2012 – AUGUST 2013



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

September 2012 – August 2013

For presentation to the Governing Authority of
University College Dublin, National University of Ireland,
Dublin at its meeting on 17 December 2013.

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Front cover image:
UCD O'Reilly Hall at night

Inside cover image:
New Upper Lake and wildlife habitat, looking towards
Daedalus building

Images on page 1

1. UCD *Ad Astra* Performing Arts Scholars, Rory Lynch and Susie Gibbons, performed at the UCD *Ad Astra* Awards Ceremony, January 2013
2. President Michael D. Higgins spoke at the Forum for Education Abroad, held at UCD, December 2012, which attracted 400 international higher education professionals. It was the first time the conference had taken place outside the US
3. Third year UCD medical student, Ying Ying Thum from Malaysia, was awarded the UCD International Student of the Year Award by the Minister for Education and Skills, Ruairi Quinn TD. Ying Ying volunteers with St Vincent de Paul and the Little Sisters of the Poor. She also represents UCD at intervarsity level badminton and is an active member of the Malaysian Student Society
4. Pictured (l-r) outside UCD Student Centre were four TEDxUCD speakers: Dr Nora Khaldi, postdoctoral researcher in the UCD Conway Institute; Senator and Professor John Crown; Dr Rhona Mahony, Master, National Maternity Hospital; and Claire Lambe, UCD *Ad Astra* Elite Athlete
5. Pictured (l-r) at the official unveiling of the Beijing-Dublin International College (BDIC): Professor Guo Guansheng, President of BJUT; H.E. Declan Kelleher, Ambassador of Ireland to the PRC; Hao Ping, Vice-Minister of Ministry of Education of China; Minister for Education and Skills, Ruairi Quinn TD; Guo Zhongwen, Vice-Mayor of the People's Government of Beijing Municipality; and UCD President, Dr Hugh Brady
6. The UCD Men's Boat Club on their way to beating Dublin University Men's Boat Club to win the Gannon Cup, at the 2013 Irish University Boat Races on the River Liffey. Pictured from stroke to bow oar: Peter Grogan, Gearoid Duane, Joseph Nihotte, David Neale, Adrian Sheehan, Patrick Moore, Michael Bailey, Liam McCarthy and Kirsten Joyce
7. UCD O'Brien Centre for Science prior to its official opening and naming in October 2013



Ireland's EU Structural Funds
Programmes 2007-2013
Co-funded by the Irish Government
and the European Union



EUROPEAN SOCIAL FUND

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Introduction by Dr Hugh Brady, UCD President

Vision

It has been a year of steady and significant progress at University College Dublin. We may be living in challenging times but the UCD Strategic Plan to 2014 *Forming Global Minds* has provided a solid foundation on which we have continued to build. During 2012/13, we have been successful in many areas across the University, nowhere more so than in the internationalisation, research and campus development arenas.

The importance - indeed the success - of our internationalisation efforts impacts on the University on several levels and not just financially. It enhances our international reputation, attracts high-quality international students, provides more study abroad opportunities for Irish students, creates employment opportunities for early career academics and expands our international research collaborations. Research funding has experienced a major increase, rising by 50% over last year. This is a direct result of the expertise and hard work of our staff and researchers operating across the campus. Internally, the UCD campus continues to evolve rapidly, introducing world-class facilities for our students and staff, as well as for the local community within an environment that combines tasteful landscaping with natural beauty.

Our Strategic Plan is founded on the three pillars of education, research and innovation, and we are advancing these through the quality of our academic staff, the strength of our programmes and the minds, efforts and talents of our students. Further work will of course be necessary to advance our University, but together we are working to combine our knowledge and expertise for the benefit of UCD, as well as Ireland's economy, culture and society.

Education

In the ongoing global and national economic conditions, it is positive news to report a student population growth of 2.4%. Under the Strategic Plan a key focus in education is to increase the share of graduate and international students. This was achieved during the year with graduate student numbers rising by almost 4% and international numbers rising by 9.3%. In terms of how these student cohorts contribute to the overall student population, graduate and international students make up 29.3% and 21.9% respectively. Non-traditional student numbers also continued to increase and account for 23% of the student population at undergraduate level.

As part of these efforts, and in support of our focus on internationalisation, the number of graduate programmes increased. A further 60 taught programmes will be introduced next year.

Research

During 2012/13, there was a continuing prioritisation of the major research themes. The University identified five strategic priorities which align with national research policy objectives and current global challenges.

The increase of 50% in externally funded research contracts signed in 2012/13 equates to €113.1 million in funding. This means we are almost back to the peak levels achieved between 2007 and 2009, which is extremely promising for the University. Such success is a huge credit to and endorsement of our researchers, highlighting their research standing in the community. A major success achieved during 2012/13 was the Science Foundation Ireland (SFI) and industry award of over €70 million to INSIGHT, in which UCD plays a leading role. INSIGHT is designed to provide a national research platform in information and communications technology, with particular emphasis on data science and Connected Health. It combines the expertise of three existing UCD research centres and is a truly massive endeavour of national importance. We can be justifiably proud of UCD's involvement.

Research funding should benefit greatly in the coming years with the introduction of Horizon 2020. Running from 2014 to 2020, with a budget of approximately €70 billion, this is a Europe 2020 flagship initiative. Aimed at securing Europe's global competitiveness, the programme for research and innovation is part of the drive to create new growth and jobs in Europe. UCD researchers will see this as an excellent opportunity to drive their research forward.

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 and social development. The University's goal is to expand and enhance the value and quality of UCD's innovation activities. This is being achieved through developing graduates with innovation expertise and partnerships with industry, licensing agreements, patent filings and invention disclosures. The year included numerous successes, including the NexusUCD Industry Partnership Centre, which was opened by An Taoiseach Enda Kenny TD. It is part of the ongoing evolution of UCD's innovation capabilities and offers high-quality accommodation to established innovation-led companies which collaborate with UCD's world-class research base. ICON, a global provider of outsourced development services to the pharmaceutical, biotechnology and medical devices industries, announced a strategic partnership with UCD, including the establishment of the ICON Newman Fellowship in Genomics. The partnership with Elan Corporation plc, established last year, saw the appointment of the Elan Professor of the Business of Technology, while a generous gift from Tullow Oil saw the appointment of the Tullow Oil Professor of Petroleum Geosciences.

Internationalisation

UCD remains the most successful Irish university in internationalisation, outperforming all other Irish universities in the number of students on exchange programmes, international students studying in Ireland and students abroad taking UCD accredited programmes of study.



The most obvious of our internationalisation efforts is the substantial increase in our international student population with the subsequent diversity and richness of life at Belfield being enhanced by the students from 124 countries. The importance of internationalisation, however, goes beyond student numbers: it benefits global society through research, job creation and economic ties. UCD students and academics move between countries, establishing relationships and partnerships, spreading knowledge and building a global community. The University also provides a diverse range of study abroad and overseas volunteering opportunities for its Irish students.

The University's relationship with and focus on China remains. The Beijing-Dublin International College (BDIC) introduced its first degree programme in 2012. BDIC is a joint initiative between UCD and Beijing University of Technology, and this new institution for higher education was approved by the Chinese Minister of Education in 2012. Staff from UCD continued to visit China during the year to attract new students, but also to deepen relationships, teach and participate in research collaborations.

Ultimately, such initiatives will enable us to reduce our reliance on Exchequer funding. We also hope that UCD's overseas campuses will be leveraged by the likes of Enterprise Ireland, IDA and Irish cultural organisations endeavouring to strengthen links with China and other countries where we are based.

Finances

The financial challenges faced by the university sector in Ireland remain, with continued reductions in State funding. The Haddington Road Agreement, which came into effect in July 2013, has added further challenges by impacting directly on staff. UCD has been pursuing a plan to bridge the funding gap through a combination of income generation and cost efficiency measures. As a result, the University's income from non-Exchequer sources continues to increase and now stands at over 50% of our total annual turnover.

There was further positive news in 2012/13, with the anticipated surplus enabling UCD to eliminate its accumulated deficit. Given the decline in State funding, this reflects the enormous efforts and commitment of our staff. Despite the funding cuts, valued in their tens of millions, UCD staff have managed to expand student numbers and maintain our academic programme quality.

UCD Foundation

UCD continues to receive generous support from UCD Foundation as a result of catalytic gifts from alumni, friends, companies, trusts and foundations. Our new Science Centre and Law School simply would not have moved beyond the planning stage if it was not for the philanthropic support of leading donors such as Denis O'Brien and Peter Sutherland, and the numerous other alumni and friends who supported the campaigns.

Likewise, David O'Reilly was the catalyst for the establishment of the UCD Energy Institute. This has firmly embedded the culture of matching giving to keep projects on track. Notwithstanding our sadness at his untimely passing, George Moore continues to be a role model for our graduates and students and his legacy of giving back to his *alma mater* encourages the generous support of others.

UCD Foundation also provided essential support for faculty recruitment and student scholarships, and played a pivotal role in funding UCD's Access Centre and the UCD *Ad Astra Academy*, which is creating a dedicated and nurturing environment for our top students.

Campus development

In terms of the University's infrastructure it has been a busy year. Through our capital development plans we continue to create the environments in which our students, researchers and academics can create, innovate and improve the way we live.

The UCD Student Centre was opened formally by An Taoiseach Enda Kenny TD, in November 2012. The Centre has greatly enhanced the Belfield campus with world-class facilities that are available to students, staff and the local community. This is now a focus for social, creative and sporting activity on the Belfield campus.

The second phase of the UCD O'Brien Centre for Science was almost complete at year-end. It will include new and refurbished facilities, supporting the lifecycle of the scientist from school children to university to the entrepreneurs of tomorrow, driving our economy forward. The UCD Sutherland School of Law will be ready for autumn 2013. Innovation in design and construction ensures that it will be built to the highest standards and in line with good sustainability practices. The Systems Biology Ireland building is also nearing completion. Elsewhere, work on the University's infrastructure continues with plans to develop the Newman Joyce Precinct at an advanced stage. This is being designed with academic input to enhance academic capacity, programmes, infrastructure and student supports.

Particular attention has been paid to the design and quality of the landscaping on the Belfield campus and the further development of the UCD Woodland Walks. Interestingly, this aspect of campus development has drawn more compliments than even the building programme.

Conclusion

Under the chairmanship of Dermot Gallagher, the Governing Authority continues to offer vital guidance and experience as we pursue UCD's strategic vision. Our staff have also continued to rise to the challenges, taking on extra roles and responsibilities to ensure that our students receive the highest standard of education.

In the current economic climate, 2012/13 was another challenging year. How we responded to these challenges is indicative of our resourcefulness and determination. As such, our UCD Strategic Plan to 2014 *Forming Global Minds* remains the foundation as we seek to advance knowledge, pursue truth and foster learning. We are committed to pursuing excellence in education, research and innovation, and this report sets out how we are delivering on that commitment.



Hugh Brady
President



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COLLEGES

The University's academic structure comprises seven colleges and 38 schools. These facilitate the alignment of major disciplines and undergraduate and graduate programmes. They also improve programme visibility for potential students, industry and Government, and support UCD's engagement with the national innovation agenda.

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Strategic plan

UCD College of Agriculture, Food Science and Veterinary Medicine was established in September 2011, and comprises UCD School of Agriculture and Food Science, and UCD School of Veterinary Medicine. The schools operate independently but share a strategic commitment to improving the quality of programmes, student recruitment and research. They are committed to contributing to national economic recovery through their involvement in national initiatives. The schools have made progress towards increasing non-Exchequer revenues and are delivering innovative programmes (graduate and international), which will make a significant contribution to UCD's finances while reducing the reliance on State funding.

During the year both schools addressed the teaching, research, innovation and internationalisation objectives of the UCD Strategic Plan to 2014 *Forming Global Minds*. A range of sustainable and long-term international institutional relationships is being developed to provide significantly expanded opportunities for student mobility and exchange, as well as fostering innovation amongst students and staff.

Developments to date

The increasing interest in the College's programmes resulted in the development of new Master's degrees in: Applied Equine Science; Animal Science; Crops and Green Energy; and Food, Nutrition and Health (which will be delivered online). International interest in veterinary medicine was exceptionally strong, with students from USA, Canada, Singapore, Japan and Russia being admitted to Bachelor of Veterinary Medicine programmes. UCD School of Agriculture and Food Science continued to develop and expand its strong international links, with the recruitment of the first cohort of 30 students to a new joint undergraduate degree programme with South China Agricultural University.

Staff achieved a high rate of success in nationally and internationally funded research programmes. Principal Investigators within UCD School of Agriculture and Food Science generated €8.3 million in grants from funding agencies, including Science Foundation Ireland, Enterprise Ireland, and the Department of Agriculture, Fisheries and Food. A suite of awards was sponsored by the Veterinary Council of Ireland (including a Newman Fellowship,

a PhD studentship and commissions for online resources). Two of the College's staff delivered major policy reports highlighting the importance of the Irish Sport Horse Industry and the Cattle and Sheep Sector to the Irish economy. In addition, Professor Mark Crowe was awarded membership of the Royal Irish Academy, Professor David Brayden became the first scientist from Ireland to be awarded a Fellowship from the Controlled Release Society, and Professor Mike Gibney was appointed Chair of the Food Safety Authority of Ireland.

The College's support for UCD's innovation agenda was exemplified by the award to Professor Dolores O'Riordan, Professor of Food Science, of the Enterprise Ireland Life Science Commercialisation Award, for her contribution to innovation in the food sector. The College also secured funding for a major new Dairy Centre at Lyons Estate, valued at €2 million, with the support of industry partners. A new joint-venture emergency service – Belfield Pet Emergency Hospital – was launched in 2013. It is run by UCD in collaboration with a consortium of private veterinary practices.

The College hosted four international conferences. The *Knowledge Transfer Conference*, organised by Teagasc and UCD, addressed the future of Farm Advisory Services, while the UCD Centre for Humanitarian Action hosted the *Humanitarian Roundtable Meeting* to address significant humanitarian policy issues. Both of these conferences were organised as part of Ireland's EU Presidency. The third conference focused on Greenhouse Gases and Animal Agriculture, while the fourth, *Vet Ed 2013*, was held in UCD, and included presentations from UCD staff.

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

College Principal: Professor Michael Monaghan

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 October 2012



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1. The Local Organising Committee pictured (l-r) at the 5th Greenhouse Gas and Animal Agriculture (GGAA) scientific conference, which took place in UCD, 23-26 June 2013: Dale Crammond, Department of Agriculture, Food and the Marine (Title Sponsors); Dr Karina Pierce, UCD; Dr Richard Dewhurst, Teagasc; Dr Frank O'Mara, Teagasc; and Dr Tommy Boland, UCD
2. Pictured (l-r) at the Teagasc and UCD Knowledge Transfer Conference 2013: Professor Gerry Boyle, Director, Teagasc; Tom Kelly, Director Knowledge Transfer, Teagasc; Inge Van Oost, EU Commission, DG Agriculture and Rural Development; and UCD President, Dr Hugh Brady. This was an international conference hosted by Teagasc and UCD from 12-14 June 2013
3. Professor Temple Grandin gave a talk on Humane Slaughter of Farm Animals to an audience of over 300 veterinary students and nurses, veterinary professionals and invited guests, at UCD on 5 April 2013
4. Final year students and staff members listened to Dr Aidan Cotter, CEO, Bord Bia, during the UCD Agriculture, Food Science and Human Nutrition Careers Day. Dr Cotter and Dr Matt Dempsey, Former Editor *Irish Farmers Journal* (and both UCD Agricultural Science graduates) addressed the students. Over 30 exhibitors attended the careers fair
5. Pictured (l-r) at the UCD Agricultural Sciences Conferring Ceremony on 3 September 2012: Professor Maurice Boland, Principal, UCD College of Agriculture, Food Science and Veterinary Medicine; Minister of Agriculture, Food and the Marine, Simon Coveney TD; Dr Owen Killian, (honouree recipient) UCD Agricultural Science graduate and CEO Aryzta Ag; UCD President, Dr Hugh Brady; and Professor Alex Evans, Head of UCD School of Agriculture and Food Science
6. Veterinary medical students at the Dogs Trust Rehoming Centre, Finglas. UCD School of Veterinary Medicine provides clinical services at the Centre, with students obtaining part of their clinical training under the supervision of UCD staff veterinarians
7. The UCD School of Agriculture and Food Science exhibit at the National Ploughing Championships in Heathpark, New Ross, Co. Wexford. Approximately 180,000 people attended the National Ploughing Championships, Ireland's largest trade exhibition, from 25-27 September 2012



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UCD College of Arts and Celtic Studies

www.ucd.ie/artsceltic

Strategic plan

In 2012/13, UCD College of Arts and Celtic Studies delivered a number of objectives in line with the vision and aims of the UCD Strategic Plan to 2014 *Forming Global Minds*.

The College built on its strengths in research, and teaching and learning, as well as extending its vision for the delivery of quality research and education in the Arts and Humanities. Through its undergraduate and postgraduate programmes, the College's commitment to excellence and quality was demonstrated by staff teaching awards, quality reviews and student surveys. The year saw a significant advancement of the College's engagement with the strategic objective of internationalisation, with staff becoming increasingly involved in teaching and research collaborations with universities abroad, notably in China. The College's reputation for research continues to grow, with numerous high profile events and the securing of both national and international funding.

Developments to date

The preparation for the Newman Joyce Precinct capital development project commenced, in co-operation with UCD College of Human Sciences, James Joyce Library, and UCD Building and Services. Professor Margaret Kelleher was appointed project Academic Director for the College. This project will re-imagine teaching and research facilities in the Arts and Humanities. Planning is advancing rapidly with all stakeholders committed to the process.

The College Graduate School, under the direction of Dr Alexander Wilkinson, developed a new Graduate Studies prospectus, focusing on employability and student experiences. The School also developed a targeted communication drive to retain high performance BA students, while the online graduate showcase highlights the calibre and variety of graduate research. 2012/13 saw the completion of the first

PhD in Japanese History, a milestone in the context of widening domains of research and innovation in the College.

The College continued to develop innovative, interdisciplinary and collaborative research activity areas, such as digital humanities. The Vice-Principal for Research and Innovation, Dr Lynda Mulvin, led many initiatives in liaison with UCD Research. These included developing new research themes and an exercise to map the College's research expertise to existing and emerging research themes. Preparations to target further EU funding opportunities, in particular Horizon 2020, commenced through cross-disciplinary collaboration. Professor Margaret Kelleher and Professor Ron Pinhasi, whose areas of research are Anglo-Irish Literature and Drama, and Palaeogenetics, respectively, joined the College.

In Teaching and Learning, Dr Naomi McAreavey received the President's Teaching Award. The Vice-Principal for Teaching and Learning, Mr Feargal Murphy, co-ordinated and delivered the roll-out of the first year Introduction to Arts study skills module to all BA degree students, of which there were over 1,400. The College engaged with the University initiative on the Beijing-Dublin International Campus (BDIC), with Professors Gabriel Cooney and Muiris O'Sullivan delivering modules in Beijing. The College increased its intake of international students, especially from the US, in order to develop the forthcoming Freshman programme and to expand the existing Junior Year Abroad initiative.

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

College Principal: Professor Maeve Conrick
Deputy Principal: Professor Liam Mac Mathúna
Director of Graduate School: Dr Alexander Wilkinson

Vice-Principal for Teaching and Learning: Mr Feargal Murphy
Vice-Principal for Research and Innovation: Dr Lynda Mulvin

UCD School of Archaeology

Head of School
 Professor Tadhg O'Keefe

UCD School of Classics

Head of School
 Professor Theresa Urbainczyk

UCD School of History and Archives

Head of School
 Dr John McCafferty

UCD School of Languages and Literatures

Head of School
 Dr Michael Brophy

UCD School of Art History and Cultural Policy

Head of School
 Dr John Loughman

UCD School of English, Drama and Film

Head of School
 Professor Anne Fogarty

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

Head of School
 Professor Liam Mac Mathúna

UCD School of Music

Head of School
 Professor Julian Horton

*As of September 2012

Dean of Arts Dr Joe Brady



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1. Pictured (l-r) at the launch of a facsimile reproduction of the journal *Lia Fáil Irisleabhar Gaeilge Ollscoil na hÉireann*: Dr Maurice Manning, NUI Chancellor; Professor Liam Mac Mathúna, UCD Head of School of Irish, Celtic Studies, Folklore and Linguistics, and editor of the new edition; and President Michael D. Higgins. This journal of modern Irish studies was originally edited by former Irish President, Douglas Hyde, when Professor of Irish in UCD

2. The UCD Symphony Orchestra commenced its 10th anniversary celebrations with a performance of Beethoven's Choral Symphony, at the National Concert Hall in November. The orchestra, conducted by Ciarán Crilly, was joined by the UCD Choral Scholars and the UCD Philharmonic (directed by Desmond Earley and Orla Flanagan, respectively)

3. Dr Fintan Hoey, IRCHSS scholar and Japan Foundation Doctoral Fellow, was conferred at the UCD December conferring ceremonies with the first ever PhD in Japanese History awarded in an Irish university. UCD is the only university in Ireland that provides courses at degree level in Japanese History and in EU-US-East Asian International Relations. Pictured (l-r) are: Dr Declan Downey, PhD supervisor, UCD School of History and Archives; Dr Fintan Hoey; and Ambassador Chihiro Atsumi, Japanese Ambassador to Ireland

4. Professor Gabriel Cooney, UCD School of Archaeology, with one of the winning students at the Embassy of Ireland Beijing Open Day, as part of the EU Embassy Open Day for Young People, 15 May 2013

5. An EU conference, entitled *Innovation, Reflection and Inclusion: The Role and Contribution of the Humanities and Social Sciences*, took place at the Royal Irish Academy (RIA), in May 2013. Pictured (l-r): Professor Luke Drury, President, RIA; Máire Geoghegan-Quinn, EU Commissioner for Research, Innovation and Science; Professor Maeve Conrick, Principal, UCD College of Arts and Celtic Studies; Dr Michael Geary, Maastricht University and Woodrow Wilson Scholar; Professor Margaret Kelleher, Chair of Anglo-Irish Literature and Drama, UCD; and Dr John Bell, Head of Cabinet, Commission for Research, Innovation and Science, and UCD graduate

6. Photo of *Paris à Dublin* by student of French, Sorcha Cusack, winner of the UCD French Week Photo Competition 2013

7. Pictured at the opening of the biennial conference of the International Society of Anglo-Saxonists, in the National Museum on 28 July 2013, were event organisers Professor Mary Clayton (left), UCD School of English, Drama and Film, and Dr Alice Jorgensen (right), School of English, Trinity College Dublin, with special guest Seamus Heaney

UCD College of Business and Law

www.ucd.ie/businessandlaw

Strategic plan

The College's two schools continued to thrive, increasing their focus on research and innovation, and on internationalisation.

UCD School of Business launched a major development campaign, focused on strengthening its role in re-envisioning business, sustaining foreign direct investment and scaling indigenous enterprise. The campaign will support these initiatives by generating resources for research and teaching in areas such as digital society, financial services and innovation in food.

In pursuing its strategic mission, 'Transforming Law', UCD School of Law completed its development campaign for the new UCD Sutherland School of Law, which will enable the School to: enhance experiential learning; pursue key research themes in Human Rights, Criminology, European Law and Regulatory Governance; engage more strongly with alumni, policy and practice communities; and, more generally, build a stronger sense of community within the School.

Both Schools, recognising the importance of the global educational market, extended the scale and scope of their international collaborations and expanded their international character through increased international recruitment of both students and faculty.

Developments to date

Quality continued to be an important point of overarching focus. UCD School of Business retained its triple accreditation with the successful renewal of its Association to Advance Collegiate Schools of Business (AACSB) accreditation, following a rigorous review and site visit. Its international rankings, which are important quality indicators, particularly for international students, were also maintained and extended. Both Schools saw improved student quality across a number of measures.

Both Schools also saw a shift to more experiential learning with expanded internship and placement programmes built into modules. An 'Innovation Corridor' went live at UCD Quinn School of Business, and a further intensification of this trend will take place at UCD School of Law, with the opening of its Clinical Legal Education Centre.

Collaborations by the Schools increased: with one another through the approval of an innovative new Master's in International Business and Law, which is unique in Ireland; with new partner schools internationally; and in research, where researchers from UCD School of Business were part of the University team that secured major funding for research in Connected Health.

Major conferences included the Society of Legal Scholars Annual Seminar, hosted outside the UK for the first time by UCD School of Law; and EUROMA, the international conference of the European Operations Management Association, which was hosted by UCD School of Business.

Both Schools increased revenues from professional and short course development. UCD School of Law's single master's level programme was developed to enable legal professionals to take individual graduate-level modules, in order to accumulate credits leading to a certificate, diploma or master's degree, as well as CPD points. Executive Education at UCD School of Business showed strong revenue growth, in particular from customised industry programmes.

Student numbers continued to grow, with UCD Michael Smurfit Graduate Business School, in particular, showing a record increase in demand for its graduate programmes. This extended the School's international reach, with over 45% of the year's record enrolment being non-Irish.

Other important developments included the award of *Law School of the Year* to UCD, at this year's Danske Bank Irish Law Awards, and the construction progress of the new UCD Sutherland School of Law, scheduled to open officially in autumn 2013. UCD School of Business strengthened its advisory structures, with the restructuring of UCD Michael Smurfit Graduate Business School's Advisory Boards, and the creation of a Strategic Board for its South-East Asian joint ventures.

UCD College of Business and Law consists of two schools:

College Principal: Professor Ciarán Ó hÓgartaigh

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

UCD School of Law
Head of School/Dean
Professor Colin Scott

**As of September 2012*



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1. Professor Ciarán Ó hógartaigh, Dean of UCD Business (centre), with Aspire Scholars (l to r) Andrea Lyng, Claire O'Hara, Jamie Fahy, and Pamela Uddin. The scholarships, made possible through an anonymous donor, are available specifically for those who could not otherwise afford to study at UCD Michael Smurfit Graduate Business School. The donor's intention is that Aspire scholarships will contribute to the recovery of the Irish economy

2. Pictured (l-r) at the topping out ceremony for the UCD Sutherland School of Law, which will open in late 2013: Peter Sutherland, Professor Colin Scott, and UCD President, Dr Hugh Brady

3. Law students Ciara McManus and Nicholas Liddane pictured with the Chief Justice Susan Gageby Denham. The students were recently selected as the UCD participants in the inaugural Irish Superior Courts internship programme

4. Pictured (l-r) at the MSc in Marketing Practice business breakfast, where students met business leaders: Pat O'Doherty, Chief Executive, ESB; Orlagh McGrath, Commercial Manager, Marketing Development Programme (MDP); Katherine Aylmer, Marketing Advisor, MDP; Eoin O'Malley, Marketing Advisor, MDP; and Governor Martin O'Malley, Governor of the State of Maryland

5. Minister for Education and Skills, Ruairi Quinn TD, presented the AACSB reaccreditation certificate to Professor Tony Brabazon, Director UCD Michael Smurfit Graduate Business School and Ashley Hughes, Lecturer in Organisational Behaviour & Decision Making. This is one of the world's leading accreditations and UCD Business School is the only school in Ireland to have earned such accreditation

6. Professor Gerald L. Neuman (centre), the J. Sinclair Armstrong Professor of International, Foreign and Comparative Law at Harvard Law School, delivered this year's Kelly Memorial Lecture. He is pictured alongside Professor Colin Scott, Dean of Law, and Suzanne Egan, who lectures in International and European Human Rights Law

7. UCD Business School alumni of the year Alan Ennis, UCD Quinn School of Business, and Caroline Casey, UCD Michael Smurfit Graduate Business School

8. Students Patrick Fitzgerald (left) and Michael O'Dwyer, who received Arthur Cox Contribution to University Life Awards, with Jane Babb of Arthur Cox

UCD College of Engineering and Architecture

www.ucd.ie/eacollege

Strategic plan

In recent times the professions of Architecture and Engineering have changed and developed significantly. New opportunities have opened up as the world moves towards economic recovery. The vision of UCD College of Engineering and Architecture is to be a leading international College, addressing global questions which require global solutions. The College's mission is to be a world leader in aspects of Engineering and Architecture, as well as in international research, teaching and learning. This will be achieved by running premier national and international programmes in close collaboration with industry. With creativity as a central focus, the College also aims to further develop innovation and design excellence through the enhancement and development of existing and new national and international interdisciplinary collaborations.

Developments to date

Internationalisation remained a key focus for the College, and Memoranda of Understanding were signed in 2012/13, with both the School of Precision Instruments and Opto-Electronics, in Tianjin University, and the Schools of Architecture and Naval Architecture, Ocean and Civil Engineering, in Shanghai Jiao Tong University. In addition, an exchange agreement was signed with Hong Kong University of Science and Technology.

In 2012, the Chinese Ministry of Education approved the establishment of the Beijing-Dublin International College (BDIC), with approval also given by UCD as a recognised UCD College. Started in 2013, the first degree programme to be delivered in Beijing was the Internet of Things Engineering, led by UCD School of Electrical, Electronic and Communications Engineering. This is being delivered in collaboration with the School of Computer Science and Informatics. Professor David FitzPatrick was appointed as the Provost (Chief Academic Officer) of BDIC.

The 2012 UCD Ulysses Medal was presented to one of UCD School of Architecture's most distinguished graduates, Kevin Roche (BArch 1945), who has won worldwide recognition and

countless honours and awards for his work. This includes some of the most iconic and influential buildings produced in North America in the second half of the 20th century. In addition, staff members Sheila O'Donnell and John Tuomey won the prestigious Icon International Architectural Practice of the Year Award, in December 2012. In 2013, UCD School of Architecture launched its first online programme, the Professional Diploma in Architecture, as part of the UCD online initiative. A new Master's of Architectural Science (Landscape) was also launched.

Energy remained a key priority area for the College, and the Governing Authority approved the establishment of UCD's new Energy Institute in May 2013. A number of key College staff, including Professors Orla Feely, Mark O'Malley and Don MacElroy played a leading role in the formation of this new initiative. Professor Orla Feely was also appointed Chair of the Irish Research Council.

College research funding continued its upward trajectory, with over a quarter provided by the European Commission. The College also registered two ERC awards, with a third anticipated. In addition, the Synthesis and Solid State Pharmaceutical Cluster, was one of seven world-class centres to receive funding under the €300 million investment by Government and industry, in SFI's Research Centre's Programme. Professor Brian Glennon, UCD School of Chemical and Bioprocess Engineering, is a Co-Principal Investigator in the cluster.

UCD College of Engineering and Architecture consists of six schools:

College Principal/Dean of Engineering: Professor Gerald Byrne
Vice-Principal and Associate Dean of Engineering Taught Programmes: Professor Michael Bruen
Dean of Architecture: Professor Hugh Campbell
Associate Dean of Architecture: Mr Dan Sudhershnan

Vice-Principal for Research and Innovation and Graduate Research School Director: Professor Tony Fagan
Vice-Principal for Teaching and Learning: Professor Colm O'Donnell
Vice-Principal for Internationalisation and Development: Professor David FitzPatrick

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

UCD School of Chemical and Bioprocess Engineering
Head of School
 Professor Don MacElroy

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

UCD School of Biosystems Engineering
Head of School
 Professor Francis Butler

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

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

**As of September 2012*



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1. Professor Gerald Byrne (left) and PJ Rudden, President, Engineering Graduates Association (right) pictured with Engineering and Architecture Gold Medal winners for 2013: Ian Kenny; Chemical and Bioprocess Engineering; Robert O'Donoghue, Mechanical Engineering; Andras Dankhazi, Architecture; Claire Dunne, Biosystems Engineering; Raymond Carley, Electronic Engineering; Eoghan Power, Civil Engineering; and Conor O'Malley, Electrical Engineering

2. Laura Tobin, a Solar Energy Conversion Cluster PhD student, was among the first cohort of graduates to receive a Certificate in Innovation and Entrepreneurship from the TCD-UCD Innovation Academy on 30 April. Pictured (l-r) with Laura: UCD President, Dr Hugh Brady, David Corish, PhD candidate, TCD, and Dr Paddy Prendergast, Provost TCD

3. Liam Madden, a UCD Electronic Engineering graduate, has risen to the top of the global electronics industry, and is Corporate Vice-President of Xilinx Corporation, in Silicon Valley, California. He recently accepted an appointment as an Adjunct Professor in the UCD School of Electrical, Electronic and Communications Engineering

4. 2012 Ulysses Medal winner, Kevin Roche, a graduate of the UCD School of Architecture, pictured with Professor Hugh Campbell, Head of UCD School of Architecture

5. The UCD School of Architecture Studio put on a display of studio work by students of the new UCD MArch programme

6. Sheila O'Donnell and Professor John Tuomey, both UCD School of Architecture, were presented with the Icon Award for International Architectural Practice of the Year, at a ceremony in London, December 2012

7. In 2012/13, UCD joined the Engineers Without Borders (EWB) UK Challenge. First year engineering students were challenged to develop concept project designs for communities in Vietnam. The team of Cormac O'Meadhra and Amy O'Keeffe travelled to Coventry University in June to present their project, entitled *Toilet Turtle* - an extruder-based, barge-mounted dry toilet system. Pictured (l-r) are: Mark Price, Mark Price Architects; Aoife Wilson, President of EWB Ireland; Dr Vikram Pakrashi, University College Cork; Dr Amanda Gibney, UCD; Keith Finglas, Innovation Delivery Limited; and Alistair Cook, Head of Learning, EWB UK

8. Dr David Browne (left) floating in zero-g with a colleague from the Swedish Space Corporation, on a European Space Agency mission. Together with UCD PhD student, Andrew Murphy, they performed experiments to assess the effects of gravity on alloy solidification

UCD College of Health Sciences

www.ucd.ie/chs

Strategic plan

UCD College of Health Sciences embraces a wide range of educational, training and research programmes in biomedical sciences and healthcare in Ireland and abroad. The College comprises three schools: UCD School of Medicine and Medical Science; UCD School of Nursing, Midwifery and Health Systems; and UCD School of Public Health, Physiotherapy and Population Science. The College is a centre of excellence in healthcare education and research and is a major contributor to the delivery of healthcare through the newly formed Ireland East Hospital Group. A core principle of the College is the continued development of healthcare education through programme development, the introduction of new graduate programmes, improvements in the student experience, and the adoption of innovative technology and teaching methods. The College is at the heart of UCD's strategic research theme of Health and Healthcare Delivery with its unique mix of basic science, translational medicine, public health, health service research and sports medicine. In line with the strategic aim of increasing international student numbers the College attracts students from across the globe and has established the Penang Medical School in Malaysia, with its partner, RCSI.

Developments to date

UCD is at the heart of the Ireland East Hospital Group (IEHG), which was formed in April 2013. It is the largest of six academic hospital networks formed as part of the restructuring of the national health system. The IEHG comprises 11 hospitals and serves 1.1 million of the Irish population. It includes the Dublin Academic Medical Centre, which is a partnership between UCD and its two major teaching hospitals: the Mater Misericordiae University Hospital; and the St Vincent's Hospital Group. The IEHG is in the process of developing an integrated network of hospitals and primary care providers with the aim of establishing an independent healthcare trust where research and education are central to delivering excellence in patient care. The IEHG is a unique opportunity for the College to develop its educational and research programmes and to contribute to the healthcare of a quarter of the Irish population.

The College continued to promote interdisciplinary research programmes across the campus and more broadly in Ireland. This included the newly established Childhood and Human Development Research Centre, led by Professor Richard Tremblay from UCD School of Public Health, Physiotherapy and Population Science.

Researchers in UCD College of Health Sciences contributed to several major centres funded under the National Research Prioritisation action plan. These included INSIGHT, the National Data Analytics Centre, headed by UCD's Professor Barry Smyth. INSIGHT was awarded €42m by Science Foundation Ireland and began operations in July 2013. INSIGHT brings together centres in DCU, NUIG, UCC and UCD to work on 'Big Data'. A major focus of INSIGHT is Connected Health, led by Professor Brian Caulfield from UCD School of Public Health, Physiotherapy and Population Science. The programme has been designed to build on Professor Caulfield's success in leading the Technology Research for Independent Living (TRIL) programme, which has developed novel technologies for assistive living. The same team also established Applied Research for Connected Health (ARCH), which works with industry partners to develop novel healthcare technologies, such as wearable medical devices.

UCD College of Health Sciences consists of three schools:

College Principal: Professor William Powderly (interim)

UCD School of Medicine and Medical Science

Head of School/Dean
Professor William Powderly

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 Cecily Kelleher

Dean of Physiotherapy

Dr Tara Cusack

**As of September 2012*



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1. Pictured (l-r): Professor Amir Khir, Dean of Penang Medical College, and Dr Nur Izzah Binti Ibrahim Osman, the 1000th graduate of the College, which is a UCD and RCSI joint initiative
2. Medal winners in the Summer Student Research Awards 2012, (l-r) Sean Owens (bronze), Elisa D'Arcangelo (gold), and Mark Savage (silver), with chair of the programme, Dr Amanda McCann, UCD School of Medicine and Medical Science
3. UCD President, Dr Hugh Brady, with Mr Tom Lynch (left) and Professor Charles Serhan, who were recipients of honorary degrees at the 2013 medicine and nursing conferring ceremony
4. UCD School of Medicine and Medical Science staff and students assembled for the annual White Coat Ceremony, to mark a student's transition to full time clinical education
5. Pictured with Elizabeth Adams, UCD Adjunct Associate Professor and Irish Nurses and Midwives Organisation (INMO) Director of Professional Development (back row, fourth from left) and Dr Tom O'Connor (right), at the UCD International Nursing Summer School, were nursing students from University of Connecticut, Purdue, Georgetown University, University of Wisconsin, Madison, and St Anselm
6. UCD Medicine class of 2013 celebrated their conferring at O'Reilly Hall, in June 2013
7. Professor Cormac Taylor (left) was elected to the Royal Irish Academy in June 2013, in recognition of his outstanding achievements in science. Pictured (l-r) Cormac Taylor ; Professor Luke Drury, President, Royal Irish Academy; Patrick Guiry, Professor of Synthetic Organic Chemistry, Head UCD School of Chemistry and Chemical Biology; and Mark Crowe, Associate Professor, UCD School of Veterinary Medicine

UCD College of Human Sciences

www.ucd.ie/humansciences

Strategic plan

UCD's Strategic Plan to 2014 *Forming Global Minds* highlights the need to contribute to the regeneration of economic prosperity, develop new knowledge and challenge accepted truths. In order to underpin these UCD College of Human Sciences has focused on retention and strategic recruitment of key staff, enhancing student learning and experience, supporting research output and impact, and deepening internationalisation and societal engagement.

In 2012/13 the College's research was directed, in particular, towards the University's key thematic research area of Culture, Economy and Society, with sub-themes of: Identity, Conflict and Inclusion; Innovative, Ethical Public Policy and Enhancing the Public Sphere; Human Development and Flourishing/Child and Youth Wellbeing; and Smart Cities. Undergraduate programmes (the BA, delivered jointly with UCD College of Arts and Celtic Studies, and the Bachelor of Social Sciences) continued to attract a large and diverse student body, which is key to the University's educational goals, including widening participation. Masters and doctoral programmes remained increasingly attractive to both domestic and international students.

Developments to date

Enhancement of teaching and learning continued to focus on supporting the transition into university and progression through undergraduate programmes. The first year module on Learning for Success at University was mainstreamed and Peer Mentoring proved particularly beneficial. At graduate level a number of new taught programmes were introduced and existing programmes developed, while the new five year MSc in Maths, Science and Education (resulting in a post-primary teacher qualification) will be delivered in collaboration with UCD College of Science.

The College's research activities continued to be underpinned by substantial funding won from national and international sources. These included new and continuing awards from the

European Commission's Seventh Framework, and Marie Curie programmes. Funding from the Irish Research Council, under its Research Development Initiative, and from Postdoctoral Fellowships and Scholarships continued to play a significant role, as did UCD's own Seed Funding scheme and a wide range of other funding sources.

During the year the College and its constituent Schools organised several prestigious seminars and conferences. The 2nd UCD Garret FitzGerald Spring School was held on the theme Ireland in Europe After 40 Years, with an opening keynote by Professor Patrick Honohan, Governor of the Central Bank. Other major conferences were organised on themes ranging from: Are the Irish Different?; Heidegger and the Political; Women and Politics Across Philosophical Traditions; Between Heidegger, Levinas and Derrida; and Tolerance and Diversity in Ireland – North and South. Professor Noam Chomsky (MIT) lectured on 'Can Civilisation Survive Really Existing Capitalism?' and was presented with the UCD Ulysses Medal. Professor John McDowell (University of Pittsburgh) gave The Agnes Cumming Lectures in Philosophy, and was awarded an honorary doctorate. The 5th Joint Congress of the Association of European Schools of Planning (AESOP) and North American Association of Collegiate Schools of Planning (ACSP) was held at UCD in July, attracting over 1,200 delegates from 50 countries.

Professor David Farrell was elected to the Royal Irish Academy. Professor Dermot Moran was awarded the Royal Irish Academy's Gold Medal in the Humanities, as well as being announced as incoming President of the International Federation of Philosophical Societies. Professor Brigid Laffan received the THESEUS Award for Outstanding Research on European Integration 2012. Emeritus Professor Anne Buttimer was elected Vice-President of Academia Europaea. Irish Fulbright Scholar awards were received by Professor Dymphna Devine, Professor Maria Baghramian and Dr Aine Kelly.

UCD College of Human Sciences consists of ten schools:

College Principal: Professor Brian Nolan
Director of Graduate School: Dr Conor Galvin

Vice-Principal for Teaching and Learning: Dr Barbara Dooley
Vice-Principal for Research and Innovation: Professor Alun Jones
Vice-Principal for Internationalisation: Dr Jos Elkink

UCD School of Applied Social Science

Head of School
Professor Bryan Fanning

UCD School of Geography, Planning and Environmental Policy

Head of School
Professor Zorica Nedovic-Budic

UCD School of Politics and International Relations

Head of School
Professor David Farrell

UCD School of Sociology

Head of School
Professor Sinisa Malesevic

UCD School of Economics

Head of School
Professor Paul Devereux

UCD School of Information and Library Studies

Head of School
Dr Lee Komito

UCD School of Psychology

Head of School
Professor Alan Carr

Dean of Arts

Dr Joe Brady

UCD School of Education

Head of School
Professor Ciaran Sugrue

UCD School of Philosophy

Head of School
Professor Maria Baghramian

UCD School of Social Justice

Head of School
Professor Kathleen Lynch

Dean of Social Science

Professor Suzanne Quinn

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1. Pictured with MIT Professor Noam Chomsky (centre) were members of UCD School of Philosophy (l-r): Dr Jim O'Shea, Professor Dermot Moran, Professor Maria Baghramian (Head of School), and Dr Mahon O'Brien

2. Professor Dermot Moran, UCD School of Philosophy, was awarded the Royal Irish Academy (RIA) Gold Medal in the Humanities 2012, in recognition of his outstanding contribution to the field. Pictured (l-r) at the awards: Professor Eugene Kennedy, Secretary for Science, RIA; EU Commissioner for Research, Innovation and Science, Máire Geoghegan-Quinn; Professor Luke O'Neill, TCD School of Biochemistry and Immunology; Professor Dermot Moran; Professor Luke Drury, President, RIA; and Professor Colm Lennon, Secretary for Humanities, RIA

3. Professor Brigid Laffan (left) was presented with the THESEUS Award for Outstanding Research on European Integration 2012, by Catherine Day, Secretary General of the European Commission

4. Pictured (l-r) at the Fulbright Awards ceremony for UCD scholars in Dublin Castle: Dr Dympna Devine, UCD School of Education; Neave O'Clery; Ciarán Ó Braonáin; Professor Maria Baghramian, Head, UCD School of Philosophy; Dr Philip Larkin; Professor Ciarán Ó hÓgartaigh, Dean of Business, UCD; Colleen Dube, Executive Director, Fulbright Commission; Garret Sweeney; Kieran McCarthy; Dr Sandra Scanlon; Dr Ronan Sugrue; and Dr Áine Kelly, UCD School of Philosophy

5. The 5th Joint Congress of the Association of European Schools of Planning (AESOP) and the North American Association of Collegiate Schools of Planning (ACSP) was held at UCD, 15-19 July 2013. Pictured (l-r) at the opening: Professor Brian Nolan, Principal, UCD College of Human Sciences; Professor Thomas Elmqvist, Stockholm Resilience Centre; Minister for Housing and Planning, Jan O'Sullivan TD; Professor Zorica Nedovic-Budic, Head of UCD School of Geography, Planning and Environmental Policy; and UCD President, Dr Hugh Brady

6. The international Research on Imagery and Observation (RIO) conference was held in UCD in May. Pictured (l-r): Professor Craig Hall (Western University, Canada) and Co-Organiser, Professor Aidan Moran, UCD School of Psychology

UCD College of Science

www.ucd.ie/science

Strategic plan

UCD College of Science covers a range of disciplines crucial for education, innovation and research in key areas such as Earth, Energy and Environment; Health; Information and Communication; and Agri-Food. UCD Science disciplines, represented through seven Schools, include biological, chemical, geological, mathematical, physical and computer sciences, as well as finance, actuarial science, meteorology and biopharmaceutical sciences.

In education, the College continues to provide high quality programmes, offering national and international students choice, relevant knowledge and a rewarding student experience. In research and innovation, UCD College of Science is committed to supporting its staff in exploring the full spectrum of scientific enquiry, from early investigation to downstream application. As big questions increasingly require answers that draw on a multitude of skills, the College is highly supportive of institutes and centres, which allow academics to collaborate with colleagues across disciplinary teams.

Developments to date

Phase two of the UCD O'Brien Centre for Science progressed rapidly during the year. It is due to open in autumn 2013, and the stunning architecture reflects the philosophy of collaboration and innovation that underpins the vision of this project.

The College's BSc programme performed strongly for another year, with both first preferences and CAO points continuing to rise. A new five year MSc programme in Maths, Science and Education, which was developed in collaboration with UCD College of Human Science (UCD School of Education), was well received and approved by the Teaching Council, Ireland's relevant statutory body. Entry to this programme, in September 2013, will be via the common entry Science BSc. This will increase student choices from 22 to 26 options.

In the graduate domain the number of research students continued to reflect the impact of reduced research funding

opportunities. The taught masters cohort, however, increased by almost 14%, year on year. Several new taught MSc programmes were developed, complementing the existing portfolio. These covered Biological and Environmental Sciences, Biotechnology, Chemistry, Cognitive Science, Computer Science, Geological Sciences, Mathematical Sciences, Meteorology, Statistics, Physics, and Simulation Science.

During 2012/13, substantial efforts were put into the development of a range of courses catering to a new target group: online learners. Complemented by a dedicated website and media campaign, UCD College of Science will enrol this new cohort from September 2013.

Over the past two years the College has benefited from a coordinated, college-based approach to engaging with the international community. In liaison with UCD International, the College's academics visited several countries, including the USA, India and Brazil, and met potential students, agents, and university and government representatives. The result is increased interest from potential international students, deepening relationships with partner universities and the development of new offerings catering to American undergraduates.

Academics received a number of high profile and high value grants, strengthening research in areas of: 'Big Data' (including the largest single State investment in research for the new INSIGHT centre); research into various aspects of living nature; and research into earth and environment. The majority of these projects were funded through national (Science Foundation Ireland) or international (European Union) sources.

In the innovation and commercialisation space an example of how research has been turned into application is Wattics (a computer Science and Informatics spin-out company). Wattics successfully competed for InterTrade Ireland Seedcorn funding and was named the Best Emerging Company in the Dublin final of the 2012 InterTrade Ireland Seedcorn all-island business competition.

UCD College of Science consists of seven schools:

College Principal/Dean: Professor Joe Carthy
Director of Graduate School: Dr Mary Kelly-Quinn
Vice-Principal for Teaching and Learning: Dr Kathy O'Boyle
Vice-Principal for Research and Innovation: Dr Cormac Murphy

Associate Dean of Science: Professor Peter Duffy
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 Francesca Paradisi

UCD School of Biology and Environmental Science
Head of School
 Dr Thomas Gallagher

UCD School of Chemistry and Chemical Biology
Head of School
 Professor Patrick Guiry

UCD School of Geological Sciences
Head of School
 Professor Stephen Daly

UCD School of Physics
Head of School
 Professor Pádraig Dunne

UCD School of Biomolecular and Biomedical Science
Head of School
 Dr Gethin McBean

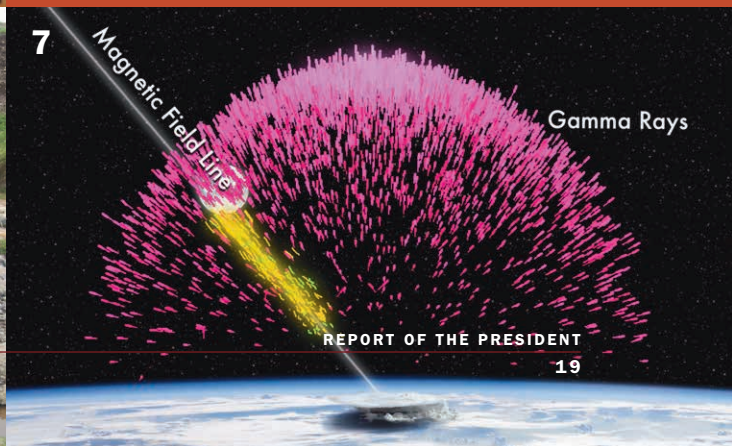
UCD School of Computer Science and Informatics
Head of School
 Mr John Dunnion

UCD School of Mathematical Sciences
Head of School
 Dr Patrick Murphy

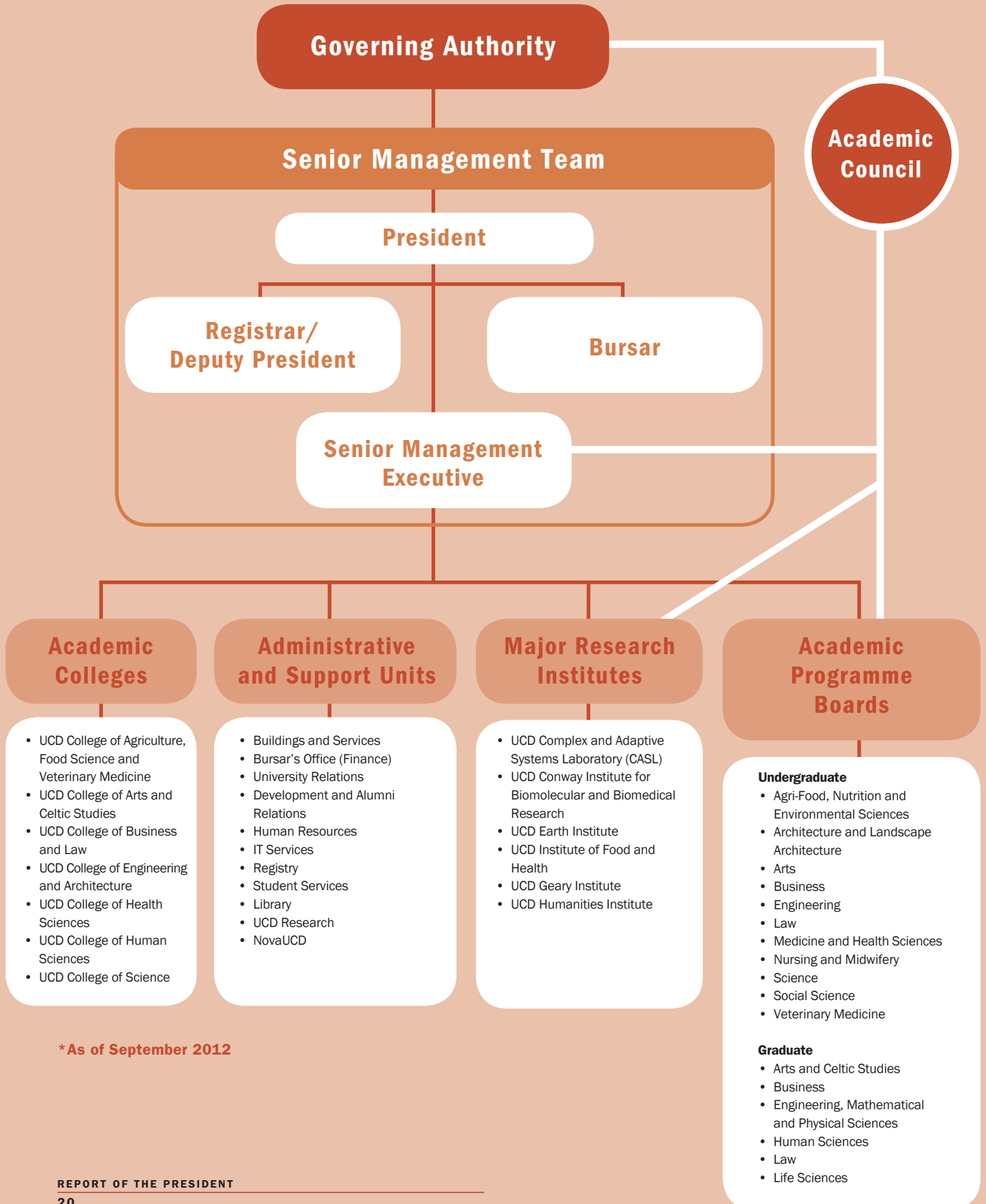
**As of September 2012*



1. Professor Jeremy Simpson (left), UCD Science Associate Dean for International Study, speaking to Suneet Singh Kochar, Head of Fateh Education, one of UCD Science's key student recruitment agencies in India, at a reception in New Delhi
2. UCD O'Brien Centre for Science photographed prior to its official opening and naming in October 2013
3. Pictured (l-r) at the announcement of the new all-Ireland breast cancer research centre, funded by Irish Cancer Society: Professor John Fitzpatrick, Head of Research, Irish Cancer Society; Sharon Burrell, breast cancer survivor; and UCD Professor William Gallagher, Director of the Irish Cancer Society Collaborative Cancer Research Centre BREAST-PREDICT
4. The UCD Science EU Project opened its doors to the wider world. In summer 2013, the OXYEVOL project (funded by the EU), and led by Professor Jenny McElwain, hosted a research experience programme for teachers. It offered two teachers (primary or secondary) an opportunity to spend four weeks with UCD's Plant Palaeoecology and Palaeobiology research group, with a view to bringing the excitement of science to Irish classrooms
5. Internationally renowned mathematician, Professor Cédric Villani, was appointed Visiting Professor in the UCD School of Mathematical Sciences in 2013. Cédric Villani was awarded the 2010 Fields Medal, which is commonly regarded as mathematics' closest analogue to the Nobel Prize
6. During 2013, UCD Science helped African countries develop their environmental expertise. Dr Mary Kelly-Quinn, UCD School of Biology and Environmental Science, worked with research students (pictured during a field trip to rivers north of Addis Ababa) in the Ethiopian Institute for Water Resources, Addis Ababa University, as part of a programme she delivered in summer 2013 to help this African country develop local expertise
7. Terrestrial Gamma-ray Flashes (TGFs) are brief outbursts of high-energy light mysteriously produced above thunderstorms. An international team of scientists, including Dr Sheila McBreen, Dr Suzanne Foley, David Tierney, Gerard Fitzpatrick and David Byrne, from UCD School of Physics, are actively studying these phenomena using the Gamma-ray Burst Monitor (GBM) aboard NASA's Fermi Gamma-ray Space Telescope. (Credit: NASA's Goddard Space Flight Center/J. Dwyer, Florida Institute of Technology)



University Organisational Structure



*As of September 2012



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EDUCATION

In the areas of teaching and learning, UCD's mission continues to focus on the delivery of world-class education. This is being achieved through enhanced teaching standards, innovative curricular structures, excellence in teaching and educational leadership, and provision of progressive technological developments. Significant advancements were made in: fostering early and lasting student engagement; formative and summative evaluation of the student experience; and campus-wide engagement to identify aspects for improvement both inside and outside the classroom.

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Profile of Student Body

Despite the difficult external economic factors, UCD's total student population grew by 2.4% in the period. Increases were achieved in key strategic student population cohorts including graduate students (almost 4%) and international students (9.3%). See Table 1.

UCD retained its position as the university of first choice in Ireland. This saw 8,846 students (an increase of almost 2%) place UCD as their first choice of university, with common entry for Science and Engineering attracting over 1,000 first preference applications.

Table 1: Student Profile 2012/2013

	2012/2013			2012/2013			% International	Total Conferred 2011/2012	Total Students by level % change since 2010/11
	Full-time	Part-time	TOTAL	Irish	Non-Irish	TOTAL			
Honours Degree	15,198	226	15,424	13,604	1,820	15,424	11.8%	3,369	2.3%
Certificate/Diploma	162	778	940	883	57	940	6.1%	644	-12.6%
Occasional	665	21	686	20	666	686	97.1%	-	-2.0%
Exchange	995	5	1,000	63	937	1,000	93.7%	-	12.9%
Total Undergraduate	17,020	1,030	18,050	14,570	3,480	18,050	19.3%	4,013	1.8%
Doctorate	1,437	205	1,642	971	671	1,642	40.9%	332	-6.3%
Master's Research	169	43	212	168	44	212	20.8%	55	-0.9%
Master's Taught	2,362	1,265	3,627	2,493	1,134	3,627	31.3%	2,433	7.1%
Certificate/Diploma	660	1,119	1,779	1,545	234	1,779	13.2%	1,201	9.7%
Continuing Professional Development	-	223	223	193	30	223	13.5%	-	-1.3%
Total Graduate	4,628	2,855	7,483	5,370	2,113	7,483	28.2%	4,021	3.9%
UCD Total	21,648	3,885	25,533	19,940	5,593	25,533	21.9%	8,034	2.4%

Fostering Early and Lasting Student Engagement

The focus for 2012/13 remained on achieving early and lasting student engagement, with particular emphasis on the first year student lifecycle. The Re-design of Assessment Initiative continued, with the aim of improving student learning through effective and efficient assessment. This initiative has led to a reduction in workload for staff and students, and a parallel shift in the focus on assessment for student learning, which emphasises the purpose of assessment activities and the importance of timely feedback for students. This allows them to monitor their own learning progress.

Introduction to Arts, piloted in 2011/12, was taken by 1,492 first year Arts students in 2012/13, providing them with an opportunity to identify and develop the skills and resources to maximise their success at university.

Dr Suzanne Guerin, Fellow in Teaching and Academic Development, introduced an adaptable research-based, in-class workshop system for Psychology modules.

The Student Support Working Group recommended establishing a more integrated student-support model to deliver academic and pastoral advice and support to students. This integration will ensure a seamless collaboration that extends across academic and student support facilities and personnel.

UCD Ad Astra Academy

UCD is committed to enabling students with exceptional talent to achieve their full potential. Through membership of the UCD Ad Astra Academy, students receive mentoring and advice which allows them to excel academically, in sport or in performance. In September 2012, 85 scholars were admitted to the Academy: 50 Academic, 25 Elite Athlete and 10 Performing Arts. In only its second year, membership of the Academy stood at 150 scholars.



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1. The 2012/13 cohort of UCD Ad Astra Scholars pictured with Mr Tony Carey, Director Performing Arts, Professor Colin Boreham, Director Elite Athletes, Professor Mark Rogers, Registrar and Deputy President, and Professor Liam Kennedy, Director Academic Scholars

2. Pictured (l-r) with Professor Mark Rogers, UCD Registrar and Deputy President (second from right), were 2012/13 Student Ambassador award winners: Matthew Deery, MSc American Literature; Sally Hayden, BCL; and Anton Katayev, BSc Engineering. To date, some 40,000 visitors have been welcomed to the Belfield campus by UCD Student Ambassadors since the scheme began in 2006

3. President's Teaching Awards were presented by UCD President, Dr Hugh Brady to (l-r) Professor Andy Prothero, UCD School of Business, and Dr Naomi McAreavey, UCD School of English, Drama and Film

4. UCD Ad Astra Academic Scholars, Louise O'Leary, Veterinary Medicine, and Cormac O Meadhra, Engineering, took part in the Ad Astra Awards Ceremony, O'Reilly Hall

5. Exhibitors and students at the 2012 Science Engineering and Technology Careers Fair, organised by the UCD Career Development Centre

6. UCD Library recently undertook a range of refurbishment projects to provide high quality user spaces that meet the changing information and learning habits of its user community. UCD Library Hub is a high quality social learning space where students can interact and learn together in a flexible, casual environment

7. Pat Felle, UCD School of Medicine and Medical Science (centre), at a recruitment fair in Kuala Lumpur, Malaysia, in December 2012, with Minister for Training & Skills at the Department of Education and Skills, Ciaran Cannon TD, and Ambassador Declan Kelly



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Strengthening and Enhancing Academic Disciplines and Programmes

In response to new developments in university education, UCD's practices continue to evolve in order to enhance academic disciplines and programmes. Online data, including student feedback and engagement measures, allow UCD to ensure the highest quality standards of teaching and learning.

All UCD Schools engaged in a second annual module enhancement round. This holistic process allows Schools to conduct an evidence-based self-appraisal, to ensure that they remain relevant to student learning needs, and provide an appropriate challenge for students. UCD is the first Irish university to introduce standardised online student feedback for all modules.

The Fellows in Teaching and Academic Development conducted in-depth research into the factors contributing to the choice of assessments by staff and students in first year modules. An awareness campaign took place subsequently to encourage a re-positioning of assessment descriptions to achieve a more student-learning perspective for 2013/14.

There were 107 new programmes approved during the academic year and changes were made to a further 48 (see Table

2). Collaborative programmes were developed in conjunction with other higher education institutions, both in Ireland and abroad, helping to improve coordination in the Irish third level sector and internationalise the UCD student body. UCD is now involved in over 70 collaborative arrangements across all seven of its constituent colleges.

Periodic reviews of the Academic Regulations were completed. These resulted in the approval of amendments to enhance the educational experience of students, raise academic standards and provide greater clarity to students and staff. The new regulations take into account the importance of learning outcomes. A new protocol on the use of degree award titles was formulated and approved in May 2013. This will clarify the nature of awards and encourage interdisciplinary study and research.

Table 2: New programme approvals and changes by National Framework of Qualifications (NFQ) level

NFQ Level	7	8	9	10	Non NFQ	Total
Approvals	4	13	87	1	2	107
Changes	-	10	37	-	1	48

Stimulating Creativity, Innovation, Entrepreneurship and Active Citizenship

UCD continues to strengthen its teaching, research and innovation capabilities with the aim of providing a wider cohort of innovative graduates. Furthermore, UCD's enduring academic standing makes it an attractive recruiting ground for employers.

UCD's Careers Development Centre continued to develop students' skills and self-belief. During 2012/13, the Centre provided a range of seminars, workshops and events. It also developed an enhanced student/employer exchange through

extensive employer engagement. The Centre facilitated visits by employers such as Microsoft, Google, JP Morgan, Boston Consulting Group, Herbert Smith Freehills, and Clyde and Co.

UCD initiated a blended-learning project where nine University modules were re-designed to combine face-to-face and online teaching. The project allowed approximately 1,200 students to experience some of the most up-to-date advances in educational digital technologies.

Growing and Developing Graduate Education

Through enhanced interdisciplinary approaches, UCD continues to grow and develop graduate education. Over 60 new graduate taught programmes will commence in September 2013.

Revisions were made to a further 37. Graduate students made up 29.3% of the student population with a 7.5% increase in graduate taught numbers on the previous year (see Table 3). International graduate student numbers continue to increase and now account for 28.2% of graduate students.

Under the UCD Graduate Recruitment Strategy initiative, UCD Graduate Studies established a Graduate Taught Programme Development Group, which aims to support academic leaders in maximising existing opportunities and addressing gaps in the graduate taught portfolio. By incorporating a review of existing

programmes in selected domains, the potential for growth is being investigated through capacity analysis, module sharing, bottlenecks, innovative models, flexible learning and value-add of portfolio integration. The strategy also considers ways in which the graduate taught portfolio can be presented for national and international markets.

UCD hosted the 4th Universitas 21 Graduate Research Conference on *Energy: Systems, Policy and Solutions*. Fifty five PhD students and academics participated, representing 18 U21 member universities. Two UCD Engineering graduate students won best oral presentations in the themes of Systems, and Solutions.

Graduate education has been enhanced by the introduction of updated policies and regulations for doctoral programme progression and the processing and examination of theses in graduate research programmes.

Table 3: Graduate numbers

Strategic Plan Target: 33%

	2009/10	2010/11	2011/12	2012/13
Graduate Taught	4,792	5,051	5,235	5,629
Graduate Research	2,103	1,956	1,966	1,854
UCD Total	24,225	24,625	24,933	25,533
% Graduate	28.5%	28.5%	28.9%	29.3%

Internationalising the Student Experience

The international student community grew by 12% to over 5,400, (see Table 4) with increased enrolments from Kuwait, Chile, Turkey and Vietnam. The non-EU graduate taught student body increased by 27.7%.

In 2012/13, international exchanges continued to give a global outlook to the UCD student experience, with 170 students participating in non-European exchanges and 369 participating in Erasmus exchanges. The list of UCD's exchange destinations saw the addition of universities from Great Britain, Turkey, USA and Brazil. In addition, 125 students participated in UCD Volunteer Overseas projects in six countries.

UCD's success in attracting funding through the Erasmus Mundus scheme continued in 2013, with €14.04 million awarded. This enabled 650 fully-funded student and staff mobility flows across Europe, India, Israel, Latin America and South Africa.

UCD's global profile was further enhanced by:

- UCD becoming Official University Partner to the European Association for International Education's 24th Annual Conference – the largest of its kind in Europe.
- UCD hosting the first Education Abroad Conference outside the US, attracting over 400 international higher education professionals.
- UCD President Hugh Brady being elected Chair of Universitas 21 (2012/2013). UCD hosted three U21 conferences during the period, including the annual U21 Graduate Research Conference.

- Professor Mary E Daly being elected Chair of the European University Centre at Peking University, for two years, in May 2013.

The Confucius Institute for Ireland celebrated its fourth anniversary in September 2012. It was also awarded its third Confucius Institute of the Year prize at a ceremony in Beijing. The Institute, together with the Irish Institute for Chinese Studies, hosted the third Chinese Economic Association (Europe), and 22nd CEA (UK) Annual Conference.

Table 4: International students

Strategic Plan Target: 25%

	'09/10	'10/11	'11/12	'12/13
International Students	4,645	4,693	5,116	5,593
Non-EU Nationality	2,569	2,635	2,936	3,290
UCD Total	24,225	24,625	24,933	25,533
% International	19.2%	19.1%	20.5%	21.9%

Strategic Plan Target: 15%

International Fee Paying Students	2,205	2,361	2,626	2,908
UCD Total	24,225	24,625	24,933	25,533
% Non-EU Nationality	10.6%	10.7%	11.8%	12.9%

Widening Participation and Supporting Lifelong Learning

UCD continued its focus on broadening access to the University, and widening participation of under-represented groups. The Widening Participation Committee prepared the report *Institutional Barriers to Full Participation in Education*. As part of *Opening Worlds: UCD's access and lifelong learning strategy*, an audit of accessibility in 10 UCD buildings was conducted; the recommended improvements will move UCD towards full campus accessibility. The newly opened UCD Student Centre was awarded the RIAI Public Choice and Universal Design award and was commended for providing accessible sporting and recreational facilities to all UCD students and staff.

The University initiated a Flexible Learning initiative with two Archaeology modules available to the general public. This is part of a new approach to providing the wider community with access to the knowledge and scholarship within UCD.

UCD was again successful in securing HEA Springboard funding, with three courses enrolling this year.

As a result of initiatives and supports, the participation level by targeted, under-represented cohorts has risen from 11.8% to 13% (see Table 5 overleaf).

Table 5: Under-represented undergraduate degree: new entrants

	'09/10	'10/11	'11/12	'12/13
HEAR Scheme Students	104	127	169	193
Students with Disability (Including DARE)	152	145	176	212
Mature Students	192	188	172	184
Part-time Undergraduate Degree Students	55	63	12	6
FETAC	35	49	44	51
Total Under-Represented Undergraduate Degree New Entrants	538	572	573	646
Total Under-represented as % of all Undergraduate New Entrants	10.3%	11.3%	11.8%	13.0%
Part-time: New Entrants				
Part-time Certificate & Diploma Students	368	435	372	350
Adult Education Students	389	348	173	156
Total Part-time	757	783	545	506
Total Part-time as % of all Undergraduate New Entrants	14.5%	15.5%	11.2%	10.2%
Total Under-represented and Part-time as % of all Undergraduate New Entrants	24.8%	26.8%	23.1%	23.1%

Teaching, Learning Innovation and Academic Development

The President's Teaching Awards 2012-14, were made to Dr Naomi McAreavey, UCD School of English, Drama and Film, and Professor Andy Prothero, UCD School of Business. Both recipients were granted a bursary to develop and implement a teaching and learning project aligned to the UCD Education Strategy. In September 2012, 31 academic staff enrolled in the Professional Certificate/Diploma in University Teaching and Learning.

UCD staff continue to be recognised in prominent national and international competitions for excellence in teaching and learning. In 2012/13, Professor Bairbre Redmond, Dean of Undergraduate Studies and Deputy Registrar Teaching and

Learning, was nominated by the HEA and the Minister for Education and Skills as the Deputy Chair of the National Forum for the Enhancement of Teaching and Learning at Third Level. Professor Redmond was also the only Irish academic invited to address the EU high-level group on Modernisation of Higher Education, where she presented on UCD's successful all-university approach to high quality teaching and learning.

In acknowledgement of their teaching excellence, Dr Eamonn Delahunt and Dr Brona Fullen, UCD School of Public Health, Physiotherapy and Population Science, were awarded UCD College Teaching Awards, in November 2012.

Quality

The UCD Quality Office continued to ensure that UCD meets its statutory obligations and is aligned with the *Standards and Guidelines for Quality Assurance in the European Higher Education Area*.

The Research Office and Library continued their development of a set of standardised statistical reports relating to research performance data (in conjunction with the UCD Quality Office), in order to assist units preparing for quality review. A parallel set of data at Institutional level will also be prepared to assist Review Groups. The data sets include research funding, research impact and research metrics.

In 2012/13, the Academic Council Committee on Quality approved the introduction of a formal annual reporting process

for taught collaborative and transnational educational provision. The first reports are due to be submitted to the UCD Quality Office by end of October 2013.

The following units and programmes underwent a quality assurance review by external Review Groups: Joint UCD/ University of Ulster Programme Review; UCD School of Music; UCD School of Geography, Planning and Environmental Policy; UCD Registry; UCD School of Sociology; UCD School of Public Health, Physiotherapy and Performance Science; UCD Teaching and Learning; Fudan University, Shanghai, China (BSc Computer Science); Teagasc (Professional Diploma in Dairy Farm Management and Stage 3 of the BAgSc Dairy Business).

3

RESEARCH

At the heart of UCD's research strategy is the ambition to address the challenges that will shape Ireland's future and the University's role in the wider world. UCD has developed the following five strategic priority areas as interdisciplinary research themes matching Ireland's national research needs and current global challenges.

- Energy and Environment
- Culture, Economy and Society
- Health
- Information, Computation and Communication
- Agri-Food

Ranked in the top 1% of Higher Education Institutions worldwide, UCD is a national leader in attracting high quality research investment to build its reputation as a leading research university.

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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 €113.1 million (see Table 1). This is an increase of €38 million (50%) in the value of awards compared

to those achieved in 2011/12. Included in the total funding is €15.4million EU funding. The value of the contribution to overheads amounted to €17.4 million.

Table 1: Research Awards

Research Awards

Year	Total value contracts signed incl. contributions to overheads (€ million)	Total contributions to overheads (€ million)	Total number of contracts awarded	Total number of proposals submitted
2005/2006	83.10	11.80	558	1,245
2006/2007	95.40	14.80	452	1,234
2007/2008	115.90	17.30	445	1,090
2008/2009	116.80	21.03	537	1,150
2009/2010	45.60	6.70	444	970
2010/2011	103.30	17.00	520	1,120
2011/2012	75.10	9.50	525	1,257
2012/2013	113.10	17.40	655	1,168

Funding Sources

Funding source	Number of contracts	Value (€ million)
Science Foundation Ireland (SFI)	74	38.0
European Commission (EC)	42	15.4
Irish Research Councils	107	6.2
Enterprise Ireland (EI)	128	14.3
Others	304	39.2
Total	655	113.1

Internal Schemes in Support of Research

UCD Seed Funding Scheme

Just over €0.5 million was disbursed through the seed funding scheme, which covered 25% of the value of the applications received. One hundred and seventy one individual awards were granted across four schemes: Dissemination and Outputs;

Developing a Vibrant Academic Community; Career Development; and Research Output Awards. The details of value and volume of applications and awards by College is shown in Table 2.

Table 2: Seed Funding

College	Volume of applications	Value of applications	Volume of awards	Value of awards
UCD College of Agriculture, Food Science and Veterinary Medicine	53	€227,729	24	€62,366
UCD College of Arts and Celtic Studies	67	€272,136	26	€74,778
UCD College of Business and Law	28	€81,147	14	€13,200
UCD College of Engineering and Architecture	47	€172,891	15	€40,746
UCD College of Health Sciences	49	€368,436	15	€82,693
UCD College of Human Sciences	68	€319,265	28	€91,679
UCD College of Science	124	€509,240	45	€108,473
Registrar	1	€2,070	-	-
Research Institutes and Other Entities	7	€68,658	4	€29,628
Vice President - University Relations	1	€15,000	-	-
Grand Total	445	2,036,570	171	503,563

UCD Strategic and Major Initiative Scheme

The strategic and major initiative scheme provides support for the development of major interdisciplinary programmes that advance the strategy for research in UCD. During the year 14 strategic and major initiative awards were granted (see Table 3).

Table 3: Strategic and Major Initiative Awards

Project owner	Project title	Value of award €
Professor Barry Smyth	Strategic Development Fund for INSIGHT Centre for Data Analytics	€210,000
Dr Aoibheann Gibbons	Research Reporting Project	€181,435
Professor Desmond Fitzgerald	Health Strategy for UCD	€150,000
Professor Desmond Fitzgerald	International Strategic Cooperation Award	€120,000
Dr Patricia Maguire	Fluxion Bioflux Microfluidics System	€62,630
Dr Nicolae Buchete	HFSP CDL Postdoctoral Award 2013 - Support for Employers Costs	€44,000
Professor Lizbeth Goodman	SMART-Lab Social Networks for Health Education & Patient Wellbeing Pilot Project - Healthbook	€34,500
Professor Robert Gerwarth	Bridging Funding - UCD Centre for War Studies	€33,575
Professor John O'Doherty	Large Animal Models for Obesity and Digestive Health Studies	€30,000
Dr Diane Payne	Social Media & Networks in Patient Groups	€30,000
Dr Aoibheann Gibbons	Culture Lab	€25,000
Dr Angela Feechan	NO (nitric oxide) Plant Pathogens; Regulation of Crop Pathogen Virulence by Nitric Oxide	€20,000
Professor Hans-Benjamin	Braun Physics Behind Next Generation Magnetic Storage Technology	€4,000
Professor Anthony Roche	Irish Drama, the Guthrie and American Theatre	€1,500

Key Research Metrics and Performance Indicators

Peer Reviewed Publications

There were 2,015 peer reviewed publications from UCD in the *Web of Science*, during 2012. This is an average of two publications per academic staff member. UCD has consistently produced the highest volume of academic publications in the country since 2008 (see Table 4).

Number of Publications in Top Ranking Outlets

The number of UCD publications in high ranking peer reviewed journals has trebled between 2003-2012. 'High ranking', as defined by Thomson Reuters InCites, refers to journals with an impact factor of above 10, where impact is relative to the rest of

the world for the time period 2008-2012 inclusive. In 2012/13, the impact of UCD's publications was 46% above the world average.

Percentage of Research-Active Staff

In 2012, 64% of UCD academic staff were research active. Active research staff are defined as Professors, Associate Professors, Senior Lecturers and Lecturers who fulfil two of the following criteria: an active grant; supervising a PhD or Research Masters student in the current academic year; and published in the last two to three years (discipline dependent).

Table 4: Number of academic publications

Publication Year	No. of Publications	No. of Books
2008	1,617	66
2009	1,782	73
2010	1,993	81
2011	2,054	62
2012	2,015	63

Infrastructure Development

UCD O'Brien Centre for Science

The new UCD O'Brien Centre for Science is a 67,000m² building, which is being developed in three distinct phases, involving an ambitious new build and refurbishment of the original UCD Science blocks. When all three phases are complete, the UCD O'Brien Centre for Science will accommodate Ireland's largest science community and will represent the largest capital investment in science in the history of the Irish State. Funding for the project, an estimated €300 million, is provided by Government, with matching funds from the University and philanthropic donations.

Phase one was built with funds from the Programme for Research in Third Level Institutions (PRTL) and University monies, and was opened in September 2011. The facility provides 6,300m² of scientific research space, with the capacity for 300 researchers working in pharmaceutical sciences, food and health, and nanomedicine.

The next phase, which is due for completion in autumn 2013, includes the development of teaching, innovation academy, outreach and public engagement facilities, as well as facilities for

Earth Sciences, the Complex and Adaptive Systems Laboratory (CASL), and the INSIGHT Centre (comprising CLIQUE, CLARITY and TRIL).

Strategic Priority: Energy and Environment

UCD is working to find solutions to the energy and environment challenges of the 21st century. In energy, the focus is on areas where Ireland has a competitive advantage, in particular Smart Grids, Smart Cities, and the interface between energy and the ICT and agri-food sectors. The UCD Earth Institute aims to provide solutions to some of Ireland's most urgent problems in the areas of sustainable living, natural resources, climate change, natural hazards, the built environment and nature conservation.

UCD Earth Institute

www.ucd.ie/earth

The UCD Earth Institute is an innovative, multidisciplinary research and education centre under the direction of Professor Chris Bean. It brings together researchers seeking to share new knowledge in Earth and Environmental Sciences, to reach out and educate younger generations, to partner with industry to find solutions for real world challenges, and to influence policy.

- The Institute has 81 Principal Investigators spanning 18 Schools, addressing research questions across the broad themes of Water, Climate, Green Technologies, Energy and Resources, Sustainable Cities and Regions, Ecology and Evolution, and Natural Hazards and Risk.
- Members were awarded a total of €11.2 million and authored 248 publications, including 22 books and book chapters and 101 peer reviewed papers. One Institute member was awarded a prestigious European Research Council grant.
- The Institute hosted the Industry and Enterprise Showcase, attracting more than 150 participants. It sponsored several events, including ENVIRON-2013, AESOP/ACSP Joint Congress 2013, Planning for Resilient Cities and Regions, and the Annual General Meeting of the British Sedimentological Research Group.

UCD Energy Institute

www.ucd.ie/energy

The Energy Institute was established in May 2013, with the strategic input of David O'Reilly (former head of Chevron). It is designed to: host a critical mass of world-class energy researchers focused on a small number of strategically important themes; be highly networked with research entities in Ireland and internationally; and work in partnership with industry and the energy policy community.

The central mission is the development of Smart Electricity networks, building on the Institute's core strength in grid research and embedding key ICT competencies in optimisation, control and intelligence in order to produce a whole-system approach from sources to loads.

Electricity Research Centre (ERC)

www.erc.ucd.ie

The Electricity Research Centre is a unique collaboration between academia and major players in the electricity industry. ERC tackles fundamental and applied research questions underpinning the development of a sustainable electrical energy system. Mark O'Malley, Professor of Electrical Engineering at UCD, founded the Centre in 1991, and is now its Scientific Director. Key to the success of the ERC is the very close relationship between researchers and industry.

- The Sustainable Electrical Energy Systems Cluster (SEES) is one of the major project initiatives led by the ERC. It brings together the Irish electricity grid, key industrial partners and collaborators in UCD, TCD, ESRI, UL and NUI Maynooth, with the financial support of Science Foundation Ireland.
- The ERC team comprises more than 60 people, including academics, postdoctoral and industry-experienced researchers, PhD students and a management team.

UCD Solar Energy Conversion (SEC)

www.seccluster.ie

The UCD Solar Energy Conversion Strategic Research Cluster, under the directorship of Professor Don MacElroy, develops novel materials and devices that harness solar energy for solar-derived power and fuels, based on principles that mimic the steps in natural photosynthesis.

- The Cluster leveraged funding in excess of €3.8 million in 2012/13, from Exchequer and non-Exchequer sources, including EU COST, SFI, Enterprise Ireland, and industry-funded projects.
- In 2012/2013, Cluster outputs included four patent filings, three invention disclosures and 39 top ranked publications in leading journals, including *Journal of the American Chemical Society (JACS)*, *Nano Research* and *Chemistry of Materials*.
- Cluster members participated in 42 international and national conferences - winning best oral presentation (OMTAT 2013 Conference) and poster presentation (UCD/IOP) - and hosted a workshop at EuroNanoForum 2013.

Strategic Priorities: Culture, Economy and Society

UCD is renowned for its scholarship in Arts, Humanities and Social Sciences. Many of UCD's leading scholars have shaped modern Ireland and our place in the world.

The interdisciplinary strategic research priority, Culture, Economy and Society draws upon theoretical, conceptual and methodological expertise in places, spaces, communities, governance, businesses and innovation, and aims to build major research programmes across a broad spectrum of inquiry.

In 2012/13, areas of research for development under this theme were: Culture and Change; Business and Responsibility; and Society and Economy.

These convey a range of UCD's research strengths to a wider audience and help to position UCD for further European research funding. Arts, Humanities and Social Sciences research was awarded €7.5 million in competitive research funding, including €2.1 million in European funding (eight awards) and €2.2 million funding from the Irish Research Council. These awards are enabling UCD's scholars to contribute to building a sustainable base for research and advanced education in the Arts, Humanities and Social Sciences. European funding included a prestigious European Research Council (ERC) award, hosted in UCD School of Archaeology, making it the second ERC award in UCD College of Arts and Celtic Studies. Publishing in the fields of Arts, Humanities and Social Sciences continues to strengthen with 48 books and 194 book chapters published in 2012/13. This has resulted in an overall contribution of 68% to the total number of UCD books published between 2008 and 2012.

UCD Geary Institute

www.ucd.ie/geary

The UCD Geary Institute is a centre of excellence for policy-relevant, theoretically-informed, empirically-grounded research. Led by Director Dr Philip O'Connell, the main disciplines at Geary include demography, economics, education, law, political science, psychology, and sociology.

- The *Geary Policy Peer Review* series launched as a new initiative. It draws on the community of expertise within the Geary membership to conduct impartial reviews of significant public policy documents.
- The Masterclass series continued to provide best-practice training in policy and evaluation research to the Public Service.
- A number of research projects were developed in collaboration with public and private bodies, mainly in the evaluation of health and poverty intervention programmes.

UCD Humanities Institute (HI)

www.ucd.ie/humanities

The UCD Humanities Institute, under the directorship of Professor Gerardine Meaney, is a dynamic flagship platform for research in the humanities. Its current strategic focus is to combine the traditional strengths of the humanities with the development of collaborative, interdisciplinary research projects and skills under the over-arching theme of Culture, Society and Change.

- The Institute hosted European and Canadian participants at the international ESF-funded summer school *RECODE The Challenge of Complex Diversity: Theoretical and Empirical Perspectives*.
- The Institute hosted Visiting Fellows Professor Cara Delay (History, College of Charleston), Professor Guoqi Xu (History, Hong Kong), and Professor Gregory Castle (English, Arizona State).
- UCD Press, a component of the the Humanities Institute, published 10 titles, including the *Encyclopaedia of Music in Ireland* (EMIR) by Professor Harry White, UCD School of Music and Professor Barra Boydell, DIT. With 240 contributors and approximately 2,000 entries, EMIR represents the single largest research project to date on music in Ireland.
- UCD Press also published a number of history monographs and collected essays, including: *The Irish Lord Lieutenancy c.1541-1922*, edited by Peter Gray and Olwen Purdue; and *Parnell Reconsidered*, edited by Pauric Travers and Donal McCartney. *Queen of the Heart*, edited and introduced by Philip O'Leary, was added to the Classics of Irish History series, and a biography on *Terence O'Neill* was added to the Life and Times New Series.

UCD John Hume Institute for Global Irish Studies

www.ucd.ie/johnhume

The UCD John Hume Institute for Global Irish Studies, under the directorship of Professor Gerardine Meaney, is a thematic programme established under PRTL14. It aims to transform the study of Ireland and its diaspora through a programme of interdisciplinary research, community outreach and international collaboration.

- *Digital Humanities Exploratorium: Pathways to Interdisciplinarity, Creative Praxis and Digital Humanities Research* was sponsored by the UCD John Hume Institute for Global Irish Studies. This event explored interdisciplinary pathways between academic, social and creative uses of digital media.
- The third annual *Beckett and the State of Ireland* conference took place in August 2013.



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1. Dr Emmeline Hill, a leading genomics scientist in the UCD School of Agriculture and Food Science, and a co-founder of the UCD spin-out company, Equinome, was named the Irish Tatler 2012 Woman Entrepreneur of the Year, at an awards ceremony held in Dublin
2. For the UCD O'Brien Centre for Science *Journey of Discovery* project, graphic artist, James Earley, created a visual story stretching over 130 feet on the hoarding around the developing building
3. Ireland's EU Commissioner, Máire Geoghegan-Quinn, met three of UCD's European Research Council (ERC) awardees, including (l-r): Professor Eoin Casey, UCD School of Chemical and Bioprocess Engineering; Professor Frédéric Dias, UCD School of Mathematical Sciences; and Professor Robert Gerwarth, UCD School of History and Archives, and Director, UCD Centre for War Studies
4. UCD Conway Institute celebrated 10 years of research excellence. Pictured (l-r): Des Fitzgerald, Vice-President Research, and Walter Kolch, Director UCD Conway Institute for Biomolecular and Biomedical Research. *Igniting Discovery* was published as part of the 2013 UCD Conway Festival of Research and Innovation to mark the anniversary
5. Winning photo in the Images of Research competition 2013, *The Mice Beat Me To It*, taken by Dr Niamh Howlin, UCD School of Law
6. The *UCD Faces of Research* project comprises 14 short video profiles of UCD researchers. The project was designed to increase public interest in and understanding of research. It features leading UCD researchers communicating their research to non-academic audiences, while also demonstrating the real-world benefits of the research. *UCD Faces of Research* is available on YouTube and on the University's research website
7. UCD's Professor Barry Smyth won the Irish Software Association 2012 Outstanding Academic Achievement of the Year Award. Pictured (l-r) at the award ceremony: Karl Flannery, Chairman of ISA and CEO, Storm Technology; Professor Barry Smyth, UCD School of Computer Science and Informatics; and Philip Sharpe, Chair, Irish Software Innovation Network

Strategic Priority: Health

Healthcare is evolving rapidly, driven by changes in population demographics, by discoveries in biomedical research and by emerging technologies. Healthcare research in Connected Health, diagnostics, drug development and medical devices is central to the competitiveness of Ireland's life science industries.

UCD is re-imagining the future of healthcare, one where new therapies, web-enabled technologies and home-deployed devices emerge from the symbiosis of technology and biology. Health research at UCD spans systems biology, drug development, translational medicine and population health.

UCD Conway Institute of Biomolecular and Biomedical Research

www.ucd.ie/conway

In 2013, UCD Conway Institute, led by Professor Walter Kolch, celebrated the 10th anniversary of its opening on the Belfield campus. It is an interdisciplinary research centre exploring fundamental mechanisms of chronic disease and translating results into clinical, industrial and commercial applications for the benefit of society.

- In May 2013, Professor Des Higgins, Professor of Bioinformatics at UCD School of Medicine and Medical Science, and UCD Conway Institute surpassed 100,000 total citations for his work on DNA sequence comparisons.
- In 2012/2013:
 - Non-exchequer funding accounted for approximately 50% of the total value of funded research. This included awards under EU FP7 (*FP7 Ideas; ERC Starting Independent Researcher Grant, FP7 Cooperation - Food, Agriculture and Fisheries, and Biotechnology, FP7 People - Marie Curie Initial Training Network*) by Irish charitable foundations and from Irish and foreign business.
 - There were 420 peer reviewed publications in journals which included *Nature Genetics, Cell Host & Microbe, Nature Structural & Molecular Biology, Nature Immunology, and Nature Communications*.
 - Conway Fellows made 11 invention disclosures and 20 patent applications while two patents and four licence agreements were granted.

Systems Biology Ireland (SBI)

www.ucd.ie/sbi

Systems Biology Ireland, under the directorship of Professor Walter Kolch, designs new therapeutic approaches to cancer, degenerative and inflammatory diseases based on a systems level, mechanistic understanding of cellular signal transduction networks.

- In 2012/13 SBI hosted the highly successful *International Conference on Systems Medicine – SYSMED 2012*, which attracted 182 participants and 29 speakers, all leaders in their fields.
- SBI was invited to participate in successful national and international proposals such as the Irish Cancer Society's BREAST PREDICT programme (c. €7.5 million), the EU FP7-KBBE SynSignal programme (c. €7.2 million) and the EU-FP7 IAPP SysMed programme (€1.8 million).
- Professor Günther Eissner (formerly of the Munich University Medical Centre) was appointed Chair of Translational Systems Biology, in April 2013. This strategic appointment, funded by the French pharmaceutical company Servier, will strengthen and enhance SBI's translational research capabilities.

Irish Drug Delivery Network (IDDN)

www.ucd.ie/iddn

The SFI-funded Irish Drug Delivery Network, under the directorship of Professor David Brayden, completed its five year funding cycle. IDDN brought Ireland's three schools of pharmacy together with UCD, Genzyme Ireland, Sigmoid Pharma, Arch Therapeutics and Aerogen PLC to provide a centre of excellence for research in drug delivery.

- Fourteen PhDs and seven postdoctoral research periods have been completed to date, with most now placed in industrial or academic R&D posts.
- Thirty major cross-institutional interdisciplinary papers have been published, some with industry partner co-authors, in leading high impact journals, including *Journal of Controlled Release, PLOS ONE, Biomacromolecules* and *European Journal of Pharmaceutical Sciences*.
- Industry partner Arch Therapeutics went public in the US, while another partner, Sigmoid Pharma, completed early stage clinical trials of an oral peptide for inflammatory bowel disease. IDDN provided supporting mechanistic data for both technologies.

The IDDN will continue as a network to enable EU Horizon 2020 applications, to contribute to a new SFI Centre application in Medical Devices, and to maintain academic-industrial linkage in a key national priority area.

The Centre for BioNano Interactions (CBNI)

www.ucd.ie/cbni

The Centre for BioNano Interactions is a multidisciplinary centre for Nanomedicine and Nanosafety. Professor Kenneth Dawson is the Principal Investigator.

- CBNI is a partner in a number of new grants awarded by the European Commission, including NanoSOLUTION, NanoMILE and the Graphene Future Emerging Technology Flagship. In addition, Professor Kenneth Dawson was awarded an SFI PI grant in April 2013.
- Recent work in CBNI on targeting of nanomedicines led to a publication in *Nature Nanotechnology*. The paper was highlighted in *Nature Nanotechnology* and *Nature Reviews Drug Discovery* articles.
- CBNI published a review in *Nature Nanotechnology*, which summarised current knowledge of the nanoparticle-biomolecule corona and its implications for nanoparticle-cell interactions. It included future challenges to be addressed in this field. These concepts were pioneered by CBNI and are now widely recognised and investigated by the community.

UCD Nanomedicine Centre (NMC)

www.ucd.ie/nanomedicine

The UCD Nanomedicine Centre combines research expertise in supramolecular chemistry, nanotechnology, biology and advanced imaging, in order to: develop new diagnostic techniques; understand the safety of nanoparticles and nanomaterials; and improve drug delivery methods and efficacy. The NMC, led by Scientific Director Professor Gil Lee, develops unique UCD facilities in nanoscale technologies including simulation and modelling, *in vitro* and *in vivo* imaging, and biosensing.

- In 2012, the NMC hosted an industry engagement programme and commercialisation platform, which saw leading researchers from UCD present on an array of topics including drug delivery, high-content screening, nanoparticles and systems biology.
- The NMC holds UCD's membership to the European Technology Platform in Nanomedicine (ETPN).

TRIL Centre

www.trilcentre.org

TRIL is an industry-academic collaboration between UCD, TCD and multiple industry partners, including Intel and GE Healthcare. Led by Academic Director Dr Brian Caulfield, it investigates the physical, social and cognitive consequences of ageing and develops technologies to address them. TRIL offers academic and clinical domain expertise in healthcare technology evaluations in the community.

- 2012 saw the completion of TRIL's clinical assessment programme. It involved comprehensive bio-psycho-social assessments of 1,335 community-dwelling older people.
- As one of the academic partners in TRIL, UCD was awarded

the initial research phase of Technology Centre for Connected Health, funded by Enterprise Ireland and IDA Ireland.

- The campus spin-out company, Kinesis Health Technologies, is based on Falls Risk Assessment technologies developed at TRIL.

UCD Clinical Research Centre (CRC)

www.ucd.ie/crc

Clinical research at the UCD Clinical Research Centre, led by Director Dr Peter Doran, contributes to the discovery of new innovations and improvements in medical care. It also establishes new treatments which, in turn, will improve the quality of life for patients who are living daily with chronic illness.

- Three CRC investigators were awarded HRB Clinician Scientist Awards: Professor Peter Kelly, Professor Michael Hutchinson and Professor Kenneth MacDonald.
- The CRC has established a new partnership with ICON plc, the leading clinical research organisation, focused on the training of clinical research staff.
- The CRC has enabled 11 investigator-initiated clinical trials, and is the national leader in this space.

Molecular Medicine Ireland (MMI)

www.molecularmedicineireland.ie

In 2012, Molecular Medicine Ireland celebrated its 10th anniversary as a unique biomedical research partnership, formed between UCD, NUIG, RCSI, TCD and UCC. Its mission is to build a sustainable national system to coordinate, support and promote clinical and translational research.

- Dr Graham Love was appointed Chief Executive. Professor Pat Murray, UCD Dean of Medicine, was appointed Director of the Dublin Centre for Clinical Research Network and also Clinical Director of Irish Clinical Research Infrastructure Network (ICRIN).
- MMI Clinical and Translational Research Scholar Trudy McGarry, based in UCD, was awarded the MMI Medal for her oral presentation *Beta1 Integrin is a Critical Mediator of TLR2 Induced Cell Migration and Invasion in RA*.
- Industry engagement included PhD placements as well as transferable skills mentoring offered by over 20 companies.
- MMI held its first Biobanking course in the UCD Clinical Research Centre. It was run in conjunction with UCD's Graduate Certificate in Clinical and Translational Research.

National Institute for Bioprocessing Research and Training (NIBRT)

www.nibr.ie

The National Institute for Bioprocessing Research and Training provides training and research solutions for the bioprocessing industry in state-of-the-art facilities at the Belfield Innovation

Park. In January 2013, Dr Reg Shaw was appointed as NIBRT CEO.

- In October 2012, NIBRT won the Bioprocess International Award: Manufacturing Collaboration of the Decade.
- More than 1,100 students from industry and academia attended a NIBRT training course.
- In June 2013, NIBRT, in association with its educational partners, announced that it would provide free, part-time, accredited training programmes for the unemployed, under the Springboard initiative for those who are currently unemployed. The aim is to help people find employment in the pharmaceutical industry.

Food for Health Ireland Technology Centre www.fhi.ie

Food for Health Ireland (FHI) is an industry-led, €22 million global innovation centre. It is supported by Enterprise Ireland and Irish food companies. FHI's mission is to combine scientific capabilities of its Irish academic partners (UCD, UCC, UL, Teagasc Moorepark) with the market expertise of its industry partners (Carbery Group, Dairygold Food Ingredients, Glanbia plc, Kerry Group) to generate a pipeline of innovative, nutritional, functional ingredients and products for the global food industry, and improve health, wellness and quality of life.

- FHI has developed 75 bio-functional ingredients, which include blood glucose management, enhanced immunity and ingredients to improve infant formula.
- FHI has published more than 150 peer reviewed publications to date.
- The second phase of EI/industry funding (€19.2 million) focuses on the development of FHI's outstanding scientific capabilities and the commercialisation of the outputs of the first and second phases. UCD will be the lead institute in the second phase of FHI.

UCD-RTI Applied Research Centre (ARC) www.ucd.ie/arc

UCD-RTI Applied Research Centre is a centre of excellence established as a collaboration between UCD and the United States-based Research Triangle Institute. ARC combines RTI's applied research experience with UCD's research and academic expertise, bringing this joint capacity to applied social and behavioural research initiatives in Ireland, Europe, and the United States.

- By collaborating with Irish industry, ARC has established an international research network.
- ARC submitted 16 proposals and established an active research programme of seven projects.
- ARC sponsored a discussion panel debating Total Survey Error, at the European Survey Research Association conference in Slovenia, July 2013.

Applied Research for Connected Health (ARCH)

www.arch.ie

Applied Research for Connected Health is a research initiative established in March 2013. It conducts research to support the deployment, adoption and reimbursement of Connected Health (CH) solutions. ARCH is funded by Enterprise Ireland and IDA under the Technology Centres Programme. The research initiative is steered by a group of industry partners who are actively involved in the Connected Health sector. ARCH is led by UCD and is based at NexusUCD, the UCD Industry Partnership Centre.

- ARCH is developing a technology framework for Connected Health, which will initially be applied to dementia and extended to incorporate additional clinical conditions.
- ARCH has undertaken significant healthcare economics, business and revenue modelling, and clinical and standards of care discovery research for Connected Health in the area of dementia.
- A pan-European COST action on Connected Health, led by ARCH and UCD, has reached second-phase review.

* Also see *UCD Institute of Food and Health under the strategic priority Agri-Food on page 39*

Strategic Priority: Information, Computation and Communication

The field of Information, Computation and Communication is recognised as being of major strategic importance to Ireland's ambition of creating a knowledge economy. UCD's strengths in broad research areas, such as life sciences, economics, social sciences, climate and environmental modelling, all require analysis of large-scale datasets, a deep understanding of systems and simulation through complex modelling. Within UCD, this research theme builds on the following unique collaborative programmes:

INSIGHT

www.insight-centre.org

In 2012/13, UCD together with its academic partners UCC, NUIG and DCU was awarded the largest single national research award for INSIGHT. Amounting to more than €40 million from SFI and €30 million from industry, INSIGHT is part of the SFI Research Centres Programme. INSIGHT will be a national centre in data analytics and will focus initially on two application areas: Connected Health and the Discovery Economy. INSIGHT's CEO is Professor Barry Smyth.

CLARITY - Centre for Web Sensor Technologies

www.clarity-centre.org

CLARITY, under the directorship of Professor Barry Smyth, is a partnership between UCD, DCU and Tyndall National Institute Cork. The Centre focuses on the intersection between adaptive sensing and information discovery, in order to develop innovative new technologies and contribute to improving quality of life in areas such as personal health, digital media and management of the environment.

- CLARITY's funding base is €37.3 million. In addition to €12 million from SFI, CLARITY has secured more than €15 million from EU and industry sources.
- CLARITY's scientific output has surpassed 220 journal papers and 550 conference papers. CLARITY researchers have won a number of international research awards both for symposium presentations and business enterprise.
- To date, CLARITY's research, supported by Enterprise Ireland, has led to 18 patent awards, 14 licence agreements and four spin-out companies.

In July 2013, following a successful co-application to the SFI Research Centres Programme, CLARITY formed a new €70 million Centre called INSIGHT.

UCD Complex and Adaptive Systems Laboratory (CASL)

www.ucd.ie/casl

UCD Complex and Adaptive Systems Laboratory, under the directorship of Dr Michael O'Neill, is an incubator for interdisciplinary research, underpinned by computation, mathematics and engineering.

- Fidelity Investments joined the CASL Industry Affiliates Programme, alongside ICON, AOL and Accenture.
- Professor Frederic Dias won an ERC Advanced Grant and was honoured with the Chevalier (Knight) of the Ordre des Palmes Académiques.
- Professor Pádraig Cunningham led a number of CASL researchers with Professor Barry Smyth and Dr Brian Caulfield to win €70 million for INSIGHT. CASL members also secured funding through SFI, the EU Cooperative Grant, EU COST Action, the Human Frontier Science Program under the US R&D Partnership Program.
- Professor Gary McGuire and team broke a cryptographic world record by cracking a code used by the security industry.
- CASL and IADT Dun Laoghaire's short film *Breaking Ground* won a Royal Television Society Award.

Clique - Graph and Network Analysis Cluster

www.cliquecluster.org

The Clique research cluster, under the directorship of Professor Pádraig Cunningham, addresses the development of computational techniques for the analysis and visualisation of network data.

- Clique research with industry partner Storyful was shortlisted for the Irish Software Association (ISA) 2012 Outstanding Academic Achievement of the Year Awards.
- Clique spin-out, EgoNav Analytics, came second in the NovaUCD Campus Company Development Programme (CCDP) competition.
- Several Clique PhD candidates successfully defended their theses. Two of the researchers went on to found Synference, a start-up which focuses on developing next generation predictive analytics software.
- In July 2013, together with CLARITY and TRIL, formed a new €70m centre named INSIGHT.

FMC² - Financial Mathematics and Computation Cluster

www.fmc-cluster.org

FMC², under the directorship of Professor John Cotter, is a collaboration between UCD, DCU, NUI Maynooth and industry partners. It brings together complementary expertise in financial mathematics, financial economics and computer science to create a holistic research programme in asset and risk management. It receives funding from sources including SFI, ERC and its industry partners.

- Cluster members produced 21 peer reviewed publications and 53 conference/seminar presentations.
- FMC² held a number of successful outreach events, including the *Frontiers in Financial Mathematics Conference*, with the Edgeworth Centre, and a *Bank Resolution Mechanisms Conference*.
- New members joined the FMC² Scientific Advisory Board, including Professor Douglas Breeden (Duke), Professor Michael Brennan (UCLA), Professor Maureen O'Hara (Cornell), Professor John McConnell (Purdue), Professor Matthew Spiegel (Yale) and Professor Rene Stulz (Ohio State), all of whom were involved in a number of high profile Cluster events.

National Digital Research Centre (NDRC)

www.ndrc.ie

The National Digital Research Centre helps researchers, innovators, entrepreneurs and investors to build better businesses. As an early stage investor and company builder, the Centre's mission is to create market capital by building high-impact digital ventures from opportunities in the research base. Founded in late 2006, by a consortium comprising UCD, DCU, IADT Dun Laoghaire, NCAD and TCD, the Centre works with researchers, technologists and entrepreneurs to turn great ideas into successful ventures.

- The newly launched NDRC VentureLab accelerator is dedicated to commercialising new science, technology and engineering advances to create speciality ventures.
- NDRC ventures have secured commercial investment totalling approximately €16 million. NDRC venture, LogEntries, originating in UCD, raised a multi-million euro Series A funding round.
- More than 100 new businesses have emerged through NDRC's portfolio, resulting in more than 300 new jobs. NDRC has secured a further multi-year funding agreement with the Department of Communications, Energy and Natural Resources.

Centre for Applied Data Analytics Research (CeADAR)

www.ucd.ie/ceadar

The Centre for Applied Data Analytics Research is an industry-led technology centre initiative for innovation and applied research. It accelerates the development, deployment and adoption of Data Analytics technology and relevant innovations. CeADAR was funded by Enterprise Ireland and IDA Ireland, in November 2012, to enable research in the field of Applied Data Analytics. It was launched by Richard Bruton TD, Minister for Jobs, Enterprise and Innovation, in March 2013. UCD is the lead institution with partners UCC and DIT.

- Pdraig Cunningham (UCD), Barry O'Sullivan (UCC) and Brian Mac Namee (DIT) lead the CeADAR project themes.
- CeADAR worked with 13 industry partners to create 25 deliverables. These included proof-of-concept demonstrators in eight research priority areas, as defined by industry, and creating and disseminating nine reports and three videos on the state-of-the-art data analytics.
- CeADAR created 10 full-time jobs in Ireland, in data analytics, and initiated a Data Analytics meet-up event.
- The Centre hosted an Industry Outreach Event in August 2013, at NexusUCD, to outline CeADAR's industry-defined research priority themes, demonstrate initial CeADAR technologies that are available for licence, and inform prospective collaborators about how to become involved with CeADAR.

Strategic Priority: Agri-Food

The agri-food and agri-business sector is Ireland's largest indigenous industry. Employing more than 150,000 people, it is critical to Ireland's economy and is the foundation of our culture and society.

UCD is working with the sector through industry partnership to ensure sustainability and global competitiveness. This relationship will create safe, novel foods that promote human health. The University is also working 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 helping the community to fight disease in livestock and to promote animal welfare. The key areas of research include:

- Diet and Nutrition
- Healthy Functional Foods
- Animal Health
- Reproductive Biology
- Agri-Business
- Sustainable Production
- Food Chain Integrity (Food Safety, Food Regulation and Traceability)

There is also a focus on application areas including: Personalised Nutrition; Healthy Ageing; Carbon Management; Carbon/Energy Recovery; Regulation and Standards; Animal Health and Fertility.

UCD Institute of Food and Health

www.ucd.ie/foodandhealth

The UCD Institute of Food and Health is led by Professor Mike Gibney. The Institute is a world-class centre for food and health research. It brings together academic and research staff from across UCD, in health-related aspects of food research, and aligns its research efforts with national, international and industry research agendas.

- In 2012/13 the Institute earned €8.8 million in competitively awarded research funding and continued its success within the FP7 programme.
- The Institute ranks 18th in the world on volume of publications, 9th for citations, and 7th on world impact (at 1.65 it is well above the world average of 1) in the subject area of Food Science and Technology, based on analysis from Thomas Reuters InCites.
- In January 2013, in association with the Irish Presidency of the European Council, the Institute hosted its largest and most successful policy seminar to date. *Feeding the World in 2050* was attended by over 200 people, with an opening address by President Michael D Higgins. The closing address was delivered by Simon Coveney TD, Minister for Agriculture, Food and the Marine.

Reproductive Biology Research Cluster (RBRC)

www.ucd.ie/reproduction

UCD Reproductive Biology Research Cluster, under the directorship of Professor Alexander Evans, is a research partnership between UCD and Teagasc, investigating solutions to reproductive problems in cattle. The Cluster brings together multidisciplinary scientists, bioengineers and industrial partners.

- Professor Mark Crowe was elected a member of the Royal Irish Academy in June 2013. He will coordinate EU-FP7-KBBE-2013 project 'GplusE', worth €9 million (value to UCD €1.5 million). Professor Pat Lonergan is currently partnering on EU-FP7-KBBE Coordination project entitled FECUND (value to UCD €485,000). RBRC researchers were also successful in acquiring funding through SFI TIDA, DAFM Research Stimulus awards, EI Commercial Case Feasibility support, COST action funding, and IRCSET (now IRC) and Walsh student fellowships.
- The Cluster published 27 peer reviewed publications, one review and 31 conference proceedings in 2012/13, and has submitted two invention disclosures.
- The RBRC hosted the international *16th Conference of the European Society for Domestic Animal Reproduction* and the EU AI-Vets Conference at UCD.

* Also see *Food for Health Ireland Technology Centre* under the strategic priority Health on page 36.

UCD's Major Research Programmes, Centres and Institutes

UCD Research Institutes

UCD Conway Institute	www.ucd.ie/conway
Centre for Synthesis and Chemical Biology	www.ucd.ie/cscb
UCD Geary Institute	www.ucd.ie/geary
UCD Complex and Adaptive Systems Laboratory	www.ucd.ie/casl
UCD Institute of Food and Health	www.ucd.ie/foodandhealth
UCD Humanities Institute	www.ucd.ie/humanities
UCD Earth Institute	www.ucd.ie/earth
UCD Energy Institute	www.ucd.ie/energy

SFI Centres

INSIGHT – The National Centre for Data Analytics	www.insight-centre.org
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SFI Centres for Science, Engineering and Technology (CSETs)

Clarity – Centre for Sensor Web Technologies	www.clarity-centre.org
Systems Biology Ireland	www.ucd.ie/sbi

SFI Strategic Research Clusters (UCD led)

Irish Drug Delivery Network	www.ucd.ie/iddn
Reproductive Biology Research Cluster	www.ucd.ie/reproduction
Solar Energy Conversion Cluster	www.seccluster.ie
Clique	www.cliquecluster.org
Financial Mathematics Computation Cluster (FMC ²)	www.fmc-cluster.org
Sustainable Electrical Energy Systems	www.erc.ucd.ie/projects/sees-cluster

Enterprise Ireland Technology Centres

Food Health Ireland	www.fhi.ie
Centre for Applied Data Analytics Research (CeADAR)	www.ucd.ie/ceadar
Applied Research for Connected Health (ARCH)	www.arch.ie

Major Inter-Institutional Collaborative Programmes

Molecular Medicine Ireland	www.molecularmedicineireland.ie
National Institute for Bioprocessing Research & Training	www.nibr.ie
Technology Research for Independent Living	www.trilcentre.org
National Digital Research Centre	www.ndrc.ie

UCD Research Centres

UCD Bioresources Research Centre	www.ucd.ie/bioresources
Electricity Research Centre	www.ucd.ie/erc
UCD Nanomedicine Centre	www.ucd.ie/nanomedicine
UCD Clinical Research Centre	www.ucd.ie/crc
Dublin Academic Medical Centre	www.ucd.ie/medicine/lifewithus/ourcampus/dublinacademicmedicalcentre
National Virus Reference Laboratory	nvr1.ucd.ie
Centre for BioNano Interactions	www.ucd.ie/cbni

UCD Thematic Institutes and Archives

The Charles Institute	www.ucd.ie/medicine/ourresearch/researchcentres/ucdcharlesinstituteofdermatology
The Claude Shannon Institute	www.shannoninstitute.ie
UCD Institute for Sport and Health	www.ucd.ie/instituteforsportandhealth
UCD John Hume Institute for Global Irish Studies	www.ucd.ie/johnhume
UCD Micheál Ó Cléirigh Institute	www.ucd.ie/mocleirigh
UCD Clinton Institute for American Studies	www.ucdclinton.ie/index
UCD Institute for British Irish Studies	www.ucd.ie/ibis
Irish Institute for Chinese Studies	www.ucd.ie/china
UCD Digital Library	www.digital.ucd.ie
Irish Social Science Data Archive	www.ucd.ie/issda



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INNOVATION AND PARTNERSHIP

UCD is Ireland's global University. It justly prides itself on being a world-class, research-intensive University, where excellence in education is combined with a commitment to research, creativity and innovation. As reflected in the UCD Strategic Plan to 2014 *Forming Global Minds*, innovation is the third and equal pillar of the University's core mission of service to Ireland in the wider world, alongside education and research.

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Maximising the Impact of UCD's Knowledge and Expertise

UCD is fully committed to its key role in Ireland's innovation and knowledge exchange ecosystem, as an enabler of economic growth and as a contributor to economic and social development. This is achieved through innovative and entrepreneurial graduates, the development of industry and Government partnerships, the commercialisation of research outputs, the generation of new ventures and the creation of jobs.

Consistent with Government policy, as expressed in the *Strategy for Science, Technology and Innovation, Innovation Ireland* and the *Action Plan for Jobs*, UCD supports the derivation of economic and social return from State investment in teaching and learning, research and innovation.

The mission of the Office of the Vice-President for Innovation is to enhance the value and quality of UCD's innovation activities. This will achieve the maximum impact for the University and its partners, and for social and economic life in Ireland in the wider world. The Office is pursuing this mission by supporting system-wide innovation activities across the University, including technological, policy, social and cultural innovation, through four innovation themes:

• Inspiring Creative Graduates

Through UCD's education programmes at undergraduate and graduate levels, the University nurtures disciplinary experts who are also innovative thinkers with an appreciation of other disciplines.

• Putting Knowledge to Work

By working with industry, Government, the public sector and voluntary organisations, UCD researchers conduct problem-driven research to provide multidisciplinary and integrated solutions to many of the world's greatest problems.

• Partnering with Industry

UCD currently has over 350 research partnerships with industry. The University recently launched NexusUCD to enable innovation-led companies that wish to collaborate on R&D activities with UCD, to locate their company or company unit close to UCD's world-class research community.

• Growing and Supporting Businesses

At NovaUCD, the hub for new ventures and entrepreneurs at UCD, the University provides purpose-built, state-of-the-art incubation facilities for knowledge-intensive companies alongside a comprehensive business support programme. Through UCD's technology transfer team at NovaUCD, University researchers are assisted with the identification and protection of intellectual property (IP) arising from UCD research programmes. Researchers are also assisted with the commercialisation of the IP through licensing to companies and through the formation of UCD spin-out companies.

Key innovation developments during the year

Launch of NexusUCD – The Industry Partnership Centre

An Taoiseach Enda Kenny TD, opened the new 5,250m² NexusUCD Industry Partnership Centre. NexusUCD is part of the ongoing evolution of UCD's innovation ecosystem. The Centre offers high-quality modern office space to established, innovation-led companies that collaborate with UCD's world-class research base. By locating at NexusUCD, companies will benefit from close proximity to UCD's research capacity and the largest population of talented students in Ireland.

TEDxUCD

The Office of the Vice-President for Innovation organised and hosted the first ever TEDxUCD event in the FitzGerald Chamber, at the new UCD Student Centre. The overall theme of TEDxUCD was Foresight, predicting what will happen or be needed in the future. The 12 TEDxUCD speakers included UCD graduates, researchers and students.

New UCD Commercialisation Bootcamp

Thirty seven researchers completed a five week UCD Commercialisation Bootcamp at NovaUCD. Participants on the Bootcamp represented 19 potential commercial projects which are emerging from research taking place at both UCD (32 participants and 16 projects) and at the National College of Art and Design (NCAD) (five participants and three projects), a recognised college of UCD. The overall aim of this new biannual Bootcamp is to strengthen the pipeline of commercial opportunities arising from UCD and NCAD research programmes.

BT Young Scientist Business Bootcamp

The 2013 BT Young Scientist Business Bootcamp took place at NovaUCD. The four day innovation and skills camp brought together 30 second level students who demonstrated an ability to understand how and why a simple idea can be developed into a commercially-viable enterprise. The programme, devised and delivered in partnership with the Office of the Vice-President for Innovation, aims to bridge the gap between education and business for students who demonstrate entrepreneurial flair and business acumen.

INSIGHT Centre

During the year the Government announced details of the largest State/industry co-funded research investment programme in Ireland. It marked a new collaborative approach to research. Funding of €200 million will be delivered over the next six years, through Science Foundation Ireland's Research Centres Programme, along with over €100 million and in-kind contributions from more than 150 industry partners. The largest investment is to be given to the INSIGHT Centre, led by Professor Barry Smyth, UCD School of Computer Science and Informatics. The Centre will develop breakthrough data analytics technologies to deal with the volume, variety and velocity challenges of 'Big Data'.

Centre for Applied Data Analytics Research (CeADAR)

Richard Bruton TD, Minister for Jobs, Enterprise and Innovation, announced €1 million of initial funding in CeADAR, a new data analytics technology centre. This is an Enterprise Ireland and IDA Ireland initiative. The initial research phase of the technology centre aims to make Ireland a world leader in the area of data analytics.

Led by UCD, through Professor Padraig Cunningham, UCD School of Computer Science and Informatics, the research consortium will use the initial funding to work with a group of companies to establish ways to generate business and profit from data analytics. The industry-led centre, based at NexusUCD, has a strong industry panel which includes Accenture, Adaptive Mobile, Climote, Cylon, Dell, eBay, Fidelity Investments, GBR, HP, MovingMedia, Nathean Technologies, Onwave, and Qumas.

Innovation and the Humanities

Innovation is as important in the humanities and social science as it is in the sciences and engineering. It makes an important contribution to Ireland's economic and social development. A one day conference to explore the role of innovation and the humanities took place at NovaUCD. This conference was jointly organised by the UCD Micheál Ó Cléirigh Institute for the Study of Irish History and Civilisation, UCD School of History and Archives, and the Office of the Vice-President for Innovation.

European Commissioner, Máire Geoghegan-Quinn, who has responsibility for Research, Innovation and Science, was a guest speaker at a conference examining the role, contribution and significance of research in the humanities and social sciences in Ireland and the European Union. *Innovation, Reflection and Inclusion: the Role of the Humanities and Social Sciences*, co-chaired by Professor Margaret Kelleher, UCD School of English, Drama and Film, was organised as part of Ireland's EU Presidency by UCD, NUI Maynooth and the Woodrow Wilson Centre.

The conference brought together academics, policy makers, government and European research officers to assess and reflect on the different ways in which this research is helping the process of economic recovery and sustainable development across Europe.

Other highlights

- During the year the Irish Government appointed new members to the National Competitiveness Council. These included Professor Peter Clinch, UCD Vice-President for Innovation, as well as Liam Casey, PCH; John Herlihy, Google; Sean O'Driscoll, Glen Dimplex; Louise Phelan, PayPal; Heather Reynolds, Eishtec; and Dave Shanahan, AbbVie. The Council has been reconfigured to help drive the development and implementation of the Government's Action Plan for Jobs.
- Professor Peter Clinch, UCD Vice-President for Innovation, continued to serve as a Member of the Innovation Fund Ireland Advisory Board to the Taoiseach.
- UCD and ICON plc, a global provider of outsourced development services to the pharmaceutical, biotechnology and medical device industries, announced that they had entered into a strategic partnership. The partnership supports a shared vision for transforming research, teaching, training and innovation in the sciences in Ireland, and aims to strengthen the ties between academic research and industry. As part of the partnership, ICON has established the ICON Newman Fellowship in Genomics, a prestigious two year postdoctoral fellowship based at UCD.
 - UCD and ICON also announced the launch of the ICON Business Academy, which will offer a number of tailored, University-accredited programmes to ICON staff. These will focus on areas of increasing importance for companies operating in global markets, such as managing and motivating teams across international boundaries and promoting a culture of innovation.
 - UCD and ICON also announced the launch of a Graduate Certificate in Clinical Research which will enhance the quality of graduate training in clinical research and increase the pool of talent available to ICON to support their clients' drug development programmes.
- UCD appointed Professor Jan Rosier as Élan Professor of the Business of Biotechnology, and marked the establishment of Europe's first interdisciplinary Chair in the 'Business of Biotechnology'. The appointment, funded through an endowment by Élan is part of an initiative between UCD and Élan Corporation designed to create a leadership position in the global biotechnology industry. This joint appointment between UCD College of Science and UCD School of Business will see Professor Rosier lead teaching and research at the interface between business and biotechnology.
- UCD appointed Professor Peter Haughton as Tullow Oil Professor of Petroleum Geosciences. The appointment, funded through an endowment by Tullow Oil, will build upon existing close research links between Tullow Oil and the UCD School of Geological Sciences. The goal is to grow and sustain research and education over a broad range of petroleum related scientific disciplines.
- UCD and IADT Dun Laoghaire signed a Memorandum of Understanding to develop and implement new substantive educational and creative collaborations between the two institutions.
- The UCD Earth Institute held its inaugural industry and enterprise showcase event in the UCD O'Reilly Hall. The aim of the showcase was to highlight the scope and extent of research taking place within the Institute, which is identifying and strengthening opportunities for collaboration and partnership with industry and enterprise.

- UCD secured eight employment-based postgraduate awards in a new initiative, managed by the Irish Research Council. This offers researchers the opportunity to complete a Master's degree or PhD degree while being employed by a private company or public organisation. UCD's employer partners are Glanbia, Doherty Geosolutions, Bioplastech, Inland Fisheries, Compass Informatics, and Renetech.
- Dr Edmond Harty, Technical Director at Dairymaster, and a UCD School of Biosystems Engineering graduate, was named the Ernst & Young 2012 Entrepreneur of the Year.
- Caroline Casey, CEO and founder of Kanchi, a not-for-profit disability organisation, and Alan Ennis, President and CEO, Revlon Inc, a leading global beauty care product company, were named as UCD's 2013 Business Alumni of the Year. The Awards recognise alumni who have demonstrated proven leadership skills, notable achievement in business and a significant contribution to the community, whether in Ireland or abroad.
- Dr Emmeline Hill, UCD School of Agriculture and Food Science, and a co-founder of the UCD spin-out company Equinome, was named the *Irish Tatler* 2012 Woman Entrepreneur of the Year.
- Professor Barry Smyth, UCD School of Computer Science and Informatics, received the Irish Software Association's 2012 Outstanding Academic Achievement of the Year Award.
- Four UCD students were selected to join the Washington Ireland Programme 2013. The students are among just 30 who were chosen from 525 applications.
- Eight NovaUCD-supported companies took part in Enterprise Ireland's High Potential Start-Ups Class of 2012 Showcase.
- Enbio, the UCD surface technology spin-in company, secured a €500,000 contract with the European Space Agency. The contract will enable Enbio to optimise a proprietary surface treatment for use as a 'sunscreen' to enhance satellite protection as they travel in space. The contract will also enable Enbio to establish its first manufacturing facility at NovaUCD.
- Equinome, the UCD equine genomics spin-out company, signed an agreement to licence the Equinome Speed Gene Test exclusively to the Japanese Laboratory of Racing Chemistry (LRC). This agreement will allow the LRC to be the sole provider of the Equinome Speed Gene Test to the Japanese bloodstock and horseracing industry.
- Logentrics, a UCD spin-out company which provides a cloud-based, real-time search and analysis log-file management solution for enterprises of all sizes, closed a funding round of €815,000 from Polaris Venture Partners, RRE Ventures, Frontline Ventures, and Enterprise Ireland.
- Openet, a global leader of real-time transaction management software and services, acquired Forkstream, a UCD spin-out company.
- Tethras, the world's premier localisation and translation service for mobile apps and headquartered at NovaUCD, won a 2013 Red Herring Top 100 Europe Award. This prestigious award honours the top 100 most promising technology ventures across Europe.

NovaUCD by numbers

- Forty five invention disclosures were reported.
- Thirty two patent applications were filed across all areas of life sciences, engineering and information communication technology, as follows: 15 priority patent applications; 11 PCT (Patent Co-operation Treaty) applications; and six national/regional patent applications.
- Fourteen licence agreements were concluded with indigenous and international companies.
- Two new UCD spin-out companies were incorporated.
- Nine new ventures completed the NovaUCD 2012 Campus Company Development Programme.
- At year-end, 35 knowledge-intensive ventures occupying 78% of the incubation space were located at NovaUCD.



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1. Pictured (l-r) at the official opening of NexusUCD, The Industry Partnership Centre: Dr Conor Hanley, Senior Vice-President, ResMed Ventures and Initiatives; An Taoiseach Enda Kenny TD; and Professor Peter Clinch, UCD Vice-President for Innovation
2. Pictured (l-r) in their manufacturing facility at NovaUCD: Nigel Cobbe, Vice-President, Business Development, Enbio; John O'Donoghue, CEO, Enbio; and Dr James Carton, Industrial Surfaces Programme Manager, Enbio. This UCD surface technology spin-in company is working to optimise a proprietary surface treatment which can be used as a 'sunscreen' to enhance satellite protection
3. Dr Denis Dowling, UCD School of Chemical and Bioprocess Engineering, and UCD School of Mechanical and Materials Engineering, was presented with the NovaUCD 2012 Innovation Award. The Award was presented in recognition of his long-term success in the commercialisation of intellectual property arising from UCD research programmes and also in the establishment of strategic and collaborative links with national and international industry
4. Wattics, the UCD energy management spin-out company, won the Best Emerging Company Award at the InterTradeIreland 2012 All-Island Seedcorn Business Competition. Wattics has engineered an innovative software solution that connects to off-the-shelf smart meters and discreetly decodes energy patterns of individual electrical loads demonstrating energy savings for businesses. Members of the Wattics team (l-r): Seamus Porter, Anthony Schoofs, Romain Vigo Benia, Dr Antonio Ruzzelli, and Alex Sintoni
5. Professor Dolores O'Riordan, UCD School of Agriculture and Food Science, was presented with the Enterprise Ireland 2012 Lifescience Commercialisation Award by Minister for Research and Innovation, Seán Sherlock TD, during Enterprise Ireland's 2012 Big Ideas Showcase. The award was in recognition of her exemplary contribution to innovation in the food sector through collaboration with industry
6. PurOrigin, a new venture focused on designing and developing novel, energy efficient domestic appliances, was the overall winner of the NovaUCD 2012 Campus Company Development Programme. PurOrigin's promoters (l-r), Finbarr Maguire and David Ronan, both completed Master of Engineering degrees in Energy Systems at the UCD School of Mechanical and Materials Engineering
7. Members of the I.C.E. Scan Me project team, pictured (l-r) at NovaUCD: Émer Hickey, Kinsale Community College, Co. Cork; Anna Fitzpatrick, Scoil Chonglais, Co. Wicklow; Sean Reilly, Coláiste na Coiribe, Co. Galway; Aaron Hoffmann, Luttrellstown Community College, Co. Dublin; and Sean Murphy, Davitt College, Co. Mayo. With the idea of developing a medical database that can be accessed in an emergency situation, via a personalised QR code, the team was awarded overall winner of the 2013 BT Young Scientist Business Bootcamp

Fostering Innovation and Entrepreneurship at Third and Fourth Levels

John Thackara, a leading British design expert and a global authority on innovation and sustainability, delivered the seminar *Thriving in a No Growth Economy*, at UCD, as part of Innovation Dublin 2012, with support from the Interreg 4B Open Innovation Project.

The seminar was organised by the Office of the Vice-President for Innovation, along with the Institute of Designers in Ireland. It formed part of the activities of the Dublin Creative Design Network, which was established by a multidisciplinary group from across UCD's Schools of Engineering, Architecture, Business, NCAD and the Office of the Vice-President for Innovation.

The first batch of 15 UCD and TCD PhD students graduated with Certificates in Innovation and Entrepreneurship from the *Innovation Academy*. As part of their PhD programmes, candidates are taught modules in innovation-related subjects, while still working towards their individual PhDs. The aim of the Academy, which currently has 240 students, is to educate PhD students to recognise the innovation potential of their research and to exploit their ideas in a competitive world. During the year, Queen's University Belfast joined the *Innovation Academy* as a collaborative partner.

Fostering Innovation Among UCD Staff

As part of the drive to create a culture of innovation and entrepreneurship, the Office of the Vice-President for Innovation participated in several programmes and initiatives across the University. These included the delivery of short talks and seminars on such topics as 'Overview of the Commercialisation Process', and 'Introduction to Intellectual Property'.

UCD staff continued to commercialise their research successfully. For example, Professor Dolores O'Riordan, UCD School of Agriculture and Food, was presented with the Enterprise Ireland 2012 Lifescience Commercialisation Award, during Enterprise Ireland's 2012 Big Ideas Showcase. Professor O'Riordan was presented with the award in recognition of her exemplary contribution to innovation in the food sector through collaboration with industry.



5

UCD STUDENT EXPERIENCE

UCD provides a range of services and supports to ensure that students become well-rounded individuals during their time at university. This is an essential part of their education and one that will serve them long after they graduate. UCD is committed to creating an environment where students will enjoy and benefit from a holistic experience that is as challenging, rewarding and stimulating as possible.

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Student Administrative and Support Services

UCD remains the university of choice in Ireland, with 8,846 CAO first preferences in 2012/13. CAO points also rose for two-thirds of UCD courses, the largest increase in the sector. The efforts of UCD Student Recruitment played an important role in this success, as demonstrated by the 10,000 visitors to the UCD Open Day in November 2012. The inaugural annual Virtual Open Day was held in June 2013, when approximately 3,000 visitors viewed the site and the live Q&A forum attracted 6,000 interactions.

Innovations in student supports continued at the Student Desk. These included: extending the online documents facility to encompass the enhanced Diploma Supplement; extending self-published transcripts back to 2000; enabling third party online payments; developing the quick access Student Desk Connector; and extending the use of social media.

The new UView facility offers staff and students a one-stop summary of the student's overall academic record. This helps students track their progress and makes it easier for staff to support students. New integrated reporting has also been developed to support this new UCD online initiative.

During 2012/13, the Assessment unit conducted a survey of students who took their end-of-semester exams at the Alternate Exam and Disability Support Centre, in the Newman Building. The results showed that students were broadly satisfied with the suitability of the Newman Centre as an alternative exam location. They were also satisfied with the level of support received from the invigilation staff.

The University approved changes to compensation in the grading system, which will take effect on a phased basis over the next three years, commencing in the academic year 2013/14. The changes are being overseen by an implementation group, chaired by the Registrar. The group will deal with the project's logistical implementation and the recommendations of any further policy or regulatory changes, as well as reaching agreement on a communication plan for staff and students. In effect, by 2015/16, no modules offered by UCD will be eligible for compensation.

In line with the UCD Strategic Plan to 2014 *Forming Global Minds*, a number of policy projects and reviews were undertaken or are in progress. The Academic Council Committee on Student Discipline continues its work on student discipline policy and process, and it developed a draft Student Charter which outlines UCD's aspirations and expectations of all members of the University community. The draft is currently under consultation with key stakeholder groups and will be presented for approval to Academic Council, in early 2013/14.

Taking the opportunity presented by the extension of the remit of the Office of the Ombudsman to universities, UCD established a Task Force to review the University's approach to student complaints. This will help to identify elements for improvement and enhancement.

Applications to UCD's graduate taught programmes increased by 24%. Major enhancements were made to the online system

and significant improvements were achieved on decision turn-around times on applications received.

UCD Registry's use of social media, particularly Twitter and Facebook, continued to be popular with students.

Office of the Vice-President for Students

During the year, the Office of the Vice-President for Students pursued initiatives to ensure that UCD continues to provide the infrastructure that enables all students to reach their full potential.

UCD students are the citizens who will lead Ireland in the future. It is, therefore, important that UCD encourages volunteering and community engagement opportunities, thus allowing students to develop an awareness of their community, and national and international responsibilities. The UCDO and UCD SVP are just two of the many examples of societies that flourished on campus during 2012/13.

With UCD's large and diverse student population, some students encounter financial, health, or other difficulties. Irrespective of the cause, UCD's student advisers, counselling services, health services and chaplains provide a wide range of vital support services to students.

The Office of the Vice-President for Students oversaw Orientation 2012, a week long series of events to ensure that all new students receive an appropriate welcome to UCD and support in transitioning to third level. The highlight of the week was the series of President's Welcomes, which provide the UCD President the opportunity to formally welcome each new student.

Student Advisers

The Student Advisers continued their management and delivery of local Orientation and Peer Mentoring activities. Peer Mentoring is now fully embedded in UCD, and recognised as a key resource when it comes to helping new students settle in. In assisting these students make the transition to third level, the Peer Mentoring programme also gives senior students the opportunity to volunteer, share their experience of student life and develop their leadership skills. This programme was complemented by the Peer Assisted Learning programme and the BA LinkedUp initiative.

Student Advisers are actively involved in the management and implementation of the various student financial support schemes, an issue which has become increasingly relevant over the past few years. Given the increasing economic and personal challenges facing students, the Student Advisers continue to provide comprehensive and integrative one-to-one support (personal, social and practical) to UCD students.



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1. UCD beat UCC 1-0, in Jordanstown, to retain the Collingwood Cup, university football's biggest prize
2. UCD Sports Scholar and Kilkenny hurler, Walter Walsh, met An Taoiseach Enda Kenny TD at the official opening of the UCD Student Centre. Also pictured (left), Brian Mullins, UCD Director of Sport
3. Mary FitzGerald, daughter of former Taoiseach Garret FitzGerald and his granddaughter, Sorcha, pictured alongside a specially commissioned bronze bust of Dr Garret FitzGerald, which has been placed at the entrance to the new FitzGerald Debating Chamber in the UCD Student Centre, named in his honour
4. Members of the UCD Team Ireland sailing team who won the Student Yachting World Cup in France: (back, l-r): David FitzGerald, Ellen Cahill, Theo Murphy, Aidan McLaverty, Simon Doran, Cathal Leigh Doyle; and (sitting, l-r) Alyson Rumball, Isabella Morehead, and Barry McCartin
5. Pictured (l-r) at a reception to mark UCD's support for the Gathering 2013, and to recognise the contribution of UCD staff in organising events, were Dr Martin Butler, Vice-President for Students and Chair, UCD Gathering Steering Committee; Jim Miley, Project Director at The Gathering Ireland 2013; and UCD President, Dr Hugh Brady
6. Pictured (l-r) at the opening of the UCD Student Centre, by An Taoiseach Enda Kenny TD: Daisy Onubogu, Auditor, Literary and Historical Society 2012/13; Sinead Rooney, Auditor, Law Society 2012/13; and David Ryan, Auditor, Medical Society 2012/13
7. Judge Judy Sheindlin received the award of Vice-Presidency of the UCD Law Society in April 2013. The judge, pictured with UCD students, discussed the influence of her TV programme on perceptions and reality
8. Members of the UCD Community Musical cast performed *The Phantom of the Opera* in O'Reilly Hall during one of six February 2013 performances

Student Health and Counselling Service

During 2012/13, the UCD Student Health and Counselling Service continued to provide support to all UCD students. As a result of greater numbers of international and non-traditional Irish students, the UCD student profile is changing. Combined with the reduction in funding, this placed additional demands on the Service. Through a variety of initiatives, however, including the identification of outside counselling support, the UCD Student Health and Counselling Service continued to offer UCD students the necessary support.

Chaplains

In line with the University's approach to internationalisation there was a special outreach to international students and the establishment of an inter-faith forum among students. The chaplains were involved in lectures, symposia and talks given to students in terms of Newman's idea of a liberal education. As a service open to all, the chaplains are involved in the running of the Student Welfare Fund and assisting students in the personal, economic and academic issues which they encounter in university life. The chaplains make a contribution to the creation of the new minds and hearts that are constitutive of John Henry Newman's concept of a university.

Sports, Societies and Other Activities

UCD Student Centre

In November the new UCD Student Centre was formally opened by An Taoiseach Enda Kenny TD. In its first 300 days there were 204,390 unique visits to the three gyms. Almost 14,000 students - more than half of all UCD students - went for a gym assessment. This new facility, paid for by the students, has become the focal point for students to engage with each other while also maintaining a healthy lifestyle. The numbers using the Student Centre will be further boosted with the opening of the new Student Club House in autumn 2013.

The Garrett FitzGerald Debating Chamber, located in the Student Centre, opened in 2012/13. This impressive facility is used by all of the University's leading debating societies, including the world-renowned Literary and Historical Society.

UCD Sports and Societies

UCD is home to 56 high profile sports clubs and 110 student societies. The high levels of engagement and activity of these clubs helps attract students to the University. The relocation of Leinster Rugby to the UCD campus has provided a great boost for the UCD rugby club. Behind the scenes of the clubs and societies is the work done by hundreds of volunteers. The St Vincent de Paul Society, for example, has 800 student volunteers and one of the activities the Society engages in is the running of Donnybrook Youth Club. The Fashion Show, organised by UCD students every second year, has raised significant sums for good causes. The 600 students who belong to the International Student Society make sure there is a céad míle fáilte for UCD's growing cohort of overseas students.

Sporting Achievements

- Ladies hockey won the Leinster League and the Universities Cup (Chilean Cup). The team also won the Euro Hockey Champions Challenge 1 Cup in Italy.
- UCD won the Student Yachting World Cup, in La Rochelle, France.

- UCD Rugby won promotion to the All Ireland League (AIL) division 1A. Success was achieved in the Dudley Cup, Conroy Cup and JP Flanagan League Cup. The University fielded players at senior international and club international levels and at the National U21 World Cup.
- UCD Swimming, in their centenary year, won the men's and ladies' intervarsity meet, competed in the Swedish Grand Prix and won numerous national titles. Members competed in the British and American Youth Open and European Championships.
- UCD Soccer won the Collingwood Cup for the second year in a row and will defend their title at UCD in 2014.

Societies

- The multi-award winning singer, Emile Sandé, received the James Joyce Award from the UCD Literary and Historical Society.
- The Law Society invited celebrity Judge Judy to discuss the influence of her TV programme on perceptions and reality.
- Jenna Marbles, the internet video blogger, had students queuing from early morning for an event hosted by the Law Society. Her video blog of her appearance at UCD attracted in excess of one million YouTube hits.
- The UCD Community Musical had a five night sell-out of the O'Reilly Hall, with their award winning *Phantom of the Opera* production. The cast reflected the breadth and depth of talent of the student community as the production won a third place in the Association of Irish Musical Societies (AIMS) Awards.
- UCD Dance Society won the National University Dance Competition.



6

ENABLING FOUNDATIONS

A thriving university campus requires a strong support system which will reinforce and advance UCD's strategies, thereby providing students, staff and the wider community with a wealth of opportunities.

Under 'Enabling Foundations', the areas of Communications, Development and Alumni Relations are vital contributors to UCD's goal of creating a state-of-the-art 'knowledge hub' for the 21st century. They inform the world of UCD's successes, while encouraging alumni to participate in a culture of philanthropy that supports UCD's strategic goals.

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Finance

Finance

The University expects to generate a surplus of €3.2m for the financial year ending 30 September 2013, on its HEA core funded activities. This surplus will enable the University to eliminate its entire accumulated deficit, a remarkable achievement given the deterioration in State funding levels in recent years. This will also be the fifth year in succession that the University has generated a surplus.

Due to the difficult economic environment, however, UCD is facing a major financial challenge regarding the sustainability of continuing operations. Since 2007/08, the University has endured reduced State funding in successive years. These cuts have persisted while the demand for higher education continues to grow.

UCD's core grant was reduced by 43% between 2008 and 2012, while the grant per student FTE decreased by 61% in the same period. Replacement fee income from undergraduate students, as directed by the Minister for Education (i.e. the Student Contribution), has made only a minimal contribution to addressing the growing funding gap. As a result, it has been necessary to generate significant additional income from other sources.

Progress to date

In response to the cuts outlined above, the UCD Finance Office moved to a more collaborative model, which establishes financial plans for individual Colleges and Schools, taking into account their relative strengths and the challenges they face. Within this model there is a strong emphasis on the academic imperative, namely that no course of action should be pursued merely for the financial return. It is extremely important to the sustainability argument that academic priorities get full recognition in any financial planning process.

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 need to implement strategy and measures, particularly surplus income-generating and cost-saving initiatives, is a challenge for UCD, and this is being addressed through the ongoing work of the University's Finance, Remuneration and Asset Management Committee. The lack of timely information in relation to State funding, however, continues to adversely affect the ability of UCD to prepare multi-annual plans, which leads to uncertainty in the annual budgeting process.

In addressing the challenges that have arisen from cuts in State funding and the requirements to reduce staff numbers under the State's Employment Control Framework (ECF), the University's Budget Review Committee continued to play an important role in reviewing and monitoring expenditure levels and setting financial targets across all areas. It also ensures that initiatives to generate non-Exchequer income are encouraged and rewarded.

New services and technologies continued to improve financial reporting and budget forecasting. The planning and budgeting functions have been enhanced significantly through the development of a range of models, including revisions to the Resource Allocation Model, to ensure that resources are allocated where they are most needed. All financial reports have been migrated to the new Infohub system, which enables the authorised users to run financial reports themselves.

Commercial income generation continued to make a valuable contribution to UCD's finances. A number of new contracts around the provision of catering services have contributed to financing the operations of the University.

Income from other ancillary activities continued to increase, and 2012/13 again saw significant earnings generated in summer residential business, which was previously licensed out to an independent operator.

UCD invested in its international student recruitment and established partnerships in several locations in China. This income continues to be a valuable source of non-Exchequer funding.

In partnership with UCD suppliers, significant savings in non-payroll expenditure were accomplished through the wider use of tendering and price negotiations.

There is a growing national recognition of the importance of good procurement practices and the UCD Procurement Office continued to work with units in the University. Greater levels of aggregation and collaboration with other public sector bodies have also benefited UCD.

At year-end, the Finance Office was automating the registration process for supplier invoices, using software that is integrated with the University's main finance system.

Looking forward

In response to the projected decrease in State funding levels, UCD is compiling a plan to bridge the funding gap through a combination of income generation and cost efficiency measures. Specific financial challenges for income generation and cost efficiencies have been agreed with the University's Finance, Remuneration and Asset Management Committee. These will centre around increasing non-Exchequer sources of income in Colleges, seeking further efficiencies and savings in the general cost base of the University, and enhancing international student recruitment.

Human Resources

The year 2012/13 was a challenging one for UCD staff with the introduction of the Public Sector Stability Agreement 2013-2016 (PSSA), on 1 July 2013. The Agreement is complex due to the variations in terms and conditions of employment for different categories of staff. It was a core objective of UCD HR to ensure that staff were given key information as early as possible and that changes and clarifications from the Higher Education Authority (HEA) and the Department of Education and Skills were communicated promptly.

The programme of work outlined in the University's Human Resources (HR) Strategy for 2012-2015 is well underway. Progress has continued through the work of the University Management Team (UMT) HR Group on key HR priorities, particularly on the themes of:

- Staff Recognition and Incentivisation
- Career and Professional Development

Focus Groups have been held with different staff cohorts to solicit their views about how recognition might be enhanced. A short review was carried out to see what local recognition practices were in operation in individual Schools/Units that could be applied more widely. Recommendations arising from this process will be made to the UMT in late 2013. At a sectoral level, the University Presidents, via the Irish Universities Association (IUA), have been highly engaged in the subject of academic leadership and how key leaders and managers can be incentivised and supported to take on these vital roles. The IUA has been preparing a proposal on this topic for the HEA.

A range of Career and Professional Development initiatives continued during the year. Academic promotions progressed, with 42 staff promoted to Senior Lecturer level. A pilot initiative, the Internal Mobility and Development Programme, to enhance the opportunities for professional, administrative and technical staff was rolled out in January 2013. All positions, from the grade equivalent of SEA up to the grade of AOIA/Senior Technical

Officer, are advertised internally first. A report assessing the initiative's effectiveness will be presented to UMT by the end of 2013. For research staff the Research Careers Framework continued to evolve, in order to meet the needs of Principal Investigators and postdoctoral staff. Close collaboration continues to take place between the key service providers, namely, UCD Career Development Centre, UCD Research and UCD HR.

A key and ongoing objective of the HR team is to identify ways to improve the service and supports provided to staff managers and staff. In 2012/13, this was achieved by:

- Enhancing staff management reports, available via Infohub.
- Extending HR Partner cover to the entire university for the first time, within existing resources.
- Delivery of the 'Managing for Success Toolkit' (developed in-house by UCD HR), providing practical tips, tools and links to assist UCD staff managers in managing their staff positively and supporting their success.
- Delivery of an online recording system and Infohub reports on self-certified sick leave, enabling Schools/Units to comply with the new seven day per 24 months limit on self-certified sick leave.
- Developing the UCD Learning and Development website comprising information from nine different training providers across UCD, with the common goal of supporting staff in their day-to-day activities.
- Introducing a Diversity Monitoring System in January 2013, to assist implementation and monitoring of this policy, according to the Employment Equality Act 1998-2008.
- Improving the administration of academic promotions.
- Introducing a new Career Average Pension Scheme.
- Hosting briefing sessions for senior administrative staff to update them on recent policy changes that were relevant to Colleges, Schools and Units.

Name	UCD College/School	Position
Professor Geraldine Butler	Biomolecular and Biomedical Science	Professor
Professor Brian Caulfield	Public Health, Physiotherapy and Population Science	Professor of Physiotherapy
Professor Guenther Eissner	Systems Biology Ireland	Professor of Translational Systems Biology
Professor David FitzPatrick	Beijing-Dublin International College (BDIC)	Provost
Professor Peter D W Haughton	Geological Sciences	Tullow Oil Professor of Petroleum Geoscience
Professor Donncha Kavanagh	Business	Professor of Information and Organisation
Professor Margaret Kelleher	English, Drama and Film	Professor of Anglo-Irish Literature and Drama
Professor Sabine Koelle	Medicine and Medical Science	Professor of Anatomy and Developmental Biology
Professor Dolores O'Riordan	Agriculture and Food Science	Director, UCD Institute of Food and Health
Professor Alan Renwick	Agriculture and Food Science	Professor of Agriculture and Food Economics
Professor Jan Rosier	Biomolecular and Biomedical Science	Elan Professor of the Business of Biotechnology
Professor Gerry Wilson	Medicine and Medical Science	Professor of Rheumatology
Professor Kenneth Wolfe	Medicine and Medical Science	Professor of Genomic Evolution

Library, Information and Knowledge Management

UCD Library

UCD Library continued to promote research and innovation while supporting the learning, teaching and research needs of UCD students. The Library achieved substantial progress in its Strategic Plan objectives with improvements in supports for learning and research, and by advancing its role as a keeper of Irish cultural heritage.

Two dynamic new learning environments were opened in the Library: the Library Hub is a high quality social learning environment which provides PCs, individual work spaces and seating for laptop users, as well as group and collaborative workspaces; and the new Library Link provides users with a flexible learning space. Library Link hosted the Maths Support Centre, from March 2013, with the result that the number of consultations more than doubled.

Other new user-focused services included the self-service automation in all Library sites for loan and fine transactions, and the deployment of RFID tags to enable automation at UCD Veterinary Medicine and Blackrock libraries.

UCD Special Collections was refurbished in 2012. Two significant collections by Irish poets were also acquired. The W B Yeats Collection was donated by UCD Alumnus Joseph Hassett, which led to a major exhibition of the Yeats materials, focusing on the poet's inspirational 'muses'. The Thomas Kinsella Collection consists of the author's private library of his own works.

The UCD Digital Library was launched in October 2012, by UCD President, Dr Hugh Brady. This preservation-oriented repository of digitised cultural heritage resources and other data is a key component of UCD Library's research infrastructure. Research activities were also supported by a new data initiative, with an initial focus on geospatial and quantitative data, while there was continued support for Open Access to UCD research publications and the further development of bibliometrics services.

During the spring, as part of its Community Outreach Programme, the Library hosted 485 Leaving Certificate students from the surrounding area, affording them an optimal study area and an introduction to Library services at UCD.

The year 2012/13 was the first full year of the Library's reorganised structure. While many of the achievements were facilitated by this restructuring, it was a transitional year; as such, the planned review of the successful restructuring began in summer 2013. Many library staff also undertook training activities in connection with new and altered roles, and many presented at national and international professional conferences.

UCD IT Services

During 2012/13, UCD continued to experience a rapid rate of technological advancement, with IT Services reinforcing its commitment to understanding and meeting the IT needs of the UCD community. A key focus was the development of mobile and cloud services with the aim of supporting flexible access to IT resources, content and applications.

A significant milestone was the transfer of over 65 million staff mails to the Google Apps for Education environment. UCD is the first Irish university to move staff mail to a cloud-provided service. This transition offers an improved service at no extra cost to the University.

In November 2012, IT Services launched CloudEdu, a cloud service designed to support staff and researchers by providing them with a business-ready set of cloud solutions. In tandem with offering cloud servers, storage, hosting and network access, it also offers consultancy in design, deployment, management, utilisation and support.

IT Services initiated a Customer Engagement Project in 2013. The aim of this project was to: understand how various cohorts of staff use technology; help anticipate the changing IT needs of the University; engage staff; and identify where best practice can be applied.

IT Services launched a redesigned Student Information System interface, SISWeb, to enhance student services and engagement with key messages.

UCD management reporting tool, InfoHub, underwent a number of efficiency enhancements, including the creation of a revised student enquiry form. This allows staff and students to access comprehensive details of a student's record. A summary of research activity has been provided for UCD Schools, which combines data from UCD business systems and bibliometrics data, in order to provide information and metrics on research funding, staff and publications.

University Relations

University Relations coordinates the central communication strategy for the University and has specific responsibility for brand management and marketing, external and internal communications, and major events. University Relations works across the University to promote the activities and achievements of staff and students, enhance the reputation of UCD and build community.

Marketing

The CAO 2013 undergraduate marketing campaign provided the platform for student recruitment activities, by setting out the UCD message and leveraging the UCD brand. The campaign operated across traditional and new media channels and is an important influence driver for CAO first preferences.

In tandem with the work of the Graduate Student Recruitment Strategy Taskforce, a substantial piece of qualitative market research was undertaken. This research informed the strategic messaging in the year's graduate marketing campaign and helped provide a marketing roadmap for a longer term strategy. This will support the ongoing development work of the taskforce.

Significant marketing and project management support was provided to the project team launching a pilot series of new online courses. These will go live in September 2013.

From an international perspective, a press and online campaign to build on the reputation of UCD was used to convey key messages about the University to an international audience.

Events

University Relations led or facilitated many events across the University, including both the official opening of the UCD Student Centre by An Taoiseach Enda Kenny TD, and the UCD Foundation Day Dinner, as well as the annual Bloomsday Honorary Conferring Ceremony, and numerous visits by Ministers and VIPs.

Internal Communications

A range of activities was conducted to help build community and better engage staff and students with the objectives of the University. Working with academic colleagues, University Relations organised a series of President's Lunchtime Seminars to foster interdisciplinary debate on a broad range of topical issues.

A dedicated monthly e-zine was distributed to improve communication with staff. This was supported through a range of channels including display screens, electronic notice boards and a central events calendar. University Relations also supported academic leaders and unit managers with advice and materials, to assist their communication activities with a clear focus on encouraging face-to-face interaction with staff.

Media Relations

During 2012/13, the media relations service worked with academics to generate considerable national and international coverage of their research output. Examples included: a study which showed the impact of mothers' education on the wellbeing of children; the success of tech firm Enbio in securing a significant contract with the European Space Agency; and a report on the impact of a low GI diet on pregnant women. Other coverage included UCD's international expansion into China, and awards to prominent visitors such as Professor Noam Chomsky.

Media relations also provides a 24/7 service, responding to queries from journalists and providing expert commentators for broadcast and print media.

Online Communications

An increasingly important area of activity, University Relations produces the content for the UCD homepage as well as driving social media activity on the official UCD Facebook, Twitter and YouTube sites. Considerable work has been completed to underpin social media activity across the University through the development of policies and guidelines.

Publications

University Relations produces *UCD Today*, the University's official magazine, and the *Report of the President*, while providing input and advice in the production of major publications such as *UCD Connections* (alumni), and the undergraduate prospectus as well as smaller publications and reports.

Development and Alumni Relations

Throughout 2012/13, UCD's alumni, friends and partners responded with exemplary generosity to the key initiatives of *Forming Global Minds*, the University's Strategic Plan. Charitable gifts to UCD Foundation supported the completion of major building developments on campus (UCD Sutherland School of Law and UCD O'Brien Centre for Science) and key education and research initiatives including Fellowships and Scholarships. Alumni also gave their time to welcome and connect UCD graduates in their home cities and host UCD undergraduates as interns in their businesses, as well as returning to class reunions and events on campus.

Development

In 2012/13, UCD Foundation received €20 million in donations and pledges from graduates, corporate partners and other philanthropists. Both UCD Sutherland School of Law and the UCD O'Brien Centre for Science will open in autumn 2013.

Following an extensive consultation with alumni, friends and corporate partners in 2012, UCD School of Business embarked on a transformative multi-million euro campaign, which will unfold between 2013 and 2018. Led by a group of volunteer leaders, the Dean and senior faculty, the campaign will enable the School to realise its new vision and be recognised as a leading school in Europe, excelling in areas that are both globally relevant and important for Ireland's growth and prosperity – namely, innovation in financial services (including aviation finance), innovation in food business, and digital business and analytics. The School also plans to invest significantly in new learning technologies and to provide additional scholarships for students. Graduates and corporate partners will be crucial in enabling the School to realise its ambitious plans.

A significant gift from an alumnus kick-started the campaign for UCD Energy Institute. Based in UCD College of Engineering and Architecture, the new Energy Institute will be a transformational resource for energy research in Ireland and internationally, and reinforces Energy as one of the priority research themes stated in *Forming Global Minds*. Private philanthropy will provide the opportunity to leverage both industry and Government funding for this initiative which will have a worldwide impact.

Fundraising for UCD's Fellowship and Scholarship programmes continued to perform strongly during the year. The Newman Fellowship Programme encourages the very best scholars to remain in academia, giving them the freedom to pursue a particular area of research. Twenty four postdoctoral Newman Fellows worked in disciplines across the University, supported solely by the generosity of the corporate and philanthropic sector. Charitable support for UCD *Ad Astra Academy* continued to grow. The Academy recruits the most talented students in Ireland across its three strands: Academic, Performing Arts and Elite Athlete Scholars. Both businesses and private individuals contributed generously to the Academy in its first two years.

Lastly, through donations to the Alumni Fund, graduates supported scholarship programmes which provided a range of students from across UCD with valuable financial support.

Alumni Relations

A priority for the year was to increase use of social media to engage alumni with UCD. Work focused on Facebook, LinkedIn and Twitter, and successful initiatives ran across all three channels. Bi-monthly e-bulletins were sent to over 170,000 alumni and over 140,000 copies of *UCD Connections*, the annual alumni magazine, were distributed globally.

Events both on and off campus continued to prove popular. Alumni gathered across the world, from Singapore to San Francisco, to meet the President, deans and staff. Back on campus, capacity audiences enjoyed the annual *Characters in Conversation* events, one with alumna Dr Rhona Mahony and Olivia O'Leary, and the second with Professor Frank McGuinness, Sinéad Cusack and Patrick Mason. Members of the Class of 1962 celebrated their golden jubilee, the Class of 1973 celebrated their ruby jubilee and, for the first time, UCD hosted a diamond jubilee, for graduates of classes from 1943 to 1953.



1. UCD Sutherland School of Law building under construction. When completed in autumn 2013, the building will create a modern and innovative space for the learning and practising of legal skills, which does not currently exist in Ireland, and will benefit students, academics and the legal profession
2. UCD Staff E-zine was developed to give staff a quick monthly update on key University issues
3. In conjunction with the Vice-President for Students, University Relations supported UCD's Gathering Ireland 2013 initiative. Over 35 conferences, reunions and sporting events were held, and a dedicated *Explore UCD* Map and Guide and associated tours organised to encourage overseas visitors to the UCD campus.



SPACE OFFERS A GLOBAL PERSPECTIVE OF OUR PLANET AND OF THE COSMOS.

Professor Lorraine Hanlon
UCD School of Physics
Expert in Astrophysics

“Satellites observing the earth can monitor the effects of climate change on the polar ice caps, or map earth's gravity field to find new continents. Connecting data from satellites to ground-based data and sophisticated models, leads to a whole range of possibilities, such as warning systems for algal blooms, biodiversity monitoring and emergency response systems for natural disasters.

Looking out into the cosmos, satellites allow us to assess the threat to earth from near earth asteroids, explore our solar system for signs of life and probe the most violent explosions in the universe.”

If you can learn this much here, imagine what you could learn with a taught masters.

Experts aren't born. They're taught.
Find out how at ucd.ie/graduatestudies

4. Among the marketing activity carried out by University Relations was an advertising campaign to promote UCD graduate programmes to students. The messaging focused on the renowned expertise of UCD academics, which in turn helps students on taught masters courses to become more expert themselves. Professor Lorraine Hanlon, UCD School of Physics; Professor Ron Pinhasi, UCD School of Archaeology and Dr Harvey O'Brien, UCD School of English, Drama and Film were featured as indicative of the high level of teaching and research expertise at UCD.
5. *Characters in Conversation*. Medical alumna Rhona Mahony, Master, National Maternity Hospital, and Arts alumna Olivia O'Leary, journalist and broadcaster, entertained an audience of alumni and friends who gathered to hear their frank and informative discussion in UCD's Clinton Auditorium
6. Ruth Ferguson, Curator of Newman House, with UCD Alumnus Senator Feargal Quinn (BComm 1959), who gave guests a truly entertaining and personal insight into his student days, the retailing business and the Seanad, as part of the UCD Life Stories series with Aine Gibbons, Vice-President for Development



Capital Development

The catalytic investment in UCD's physical infrastructure in recent years has transformed the support for the University's teaching, research and innovation activities. One of the objectives is the establishment of iconic architecture, which creates a strong sense of place while delivering an exciting environment for students, staff and the wider community.

There has been considerable investment in the UCD O'Brien Centre for Science, constructing world-class teaching laboratories and classrooms for chemistry, biology, bio-molecular and physical science, while also supporting strategic research areas such as biopharma, food and health, and nanoscience. New and refurbished facilities were commissioned in the UCD O'Brien Centre for Science East and Hub Buildings. These facilities support the lifecycle of the scientist – from school children and enthusiastic young undergraduates to the ambitious PhD students and technology entrepreneurs who will drive Ireland's knowledge economy. Scientists and students will move seamlessly between laboratories, teaching facilities and innovation space. Academia and industry will work side-by-side and new enterprises will be nurtured. It is anticipated that the PRTL15-funded research facilities for earth sciences and computation will be completed by mid-2014.

The completion of the second phase of the UCD Science Link Building provides state-of-the-art laboratory and write-up accommodation for Systems Biology Ireland.

The initial masterplan workshop for the UCD Newman Joyce Precinct took place in May 2013. The design team met stakeholders and identified key issues, needs, expectations and opportunities. The challenge was to identify the full range of stakeholders and their varying aspirations across diverse activities. Preparation of a vision document to guide the development of the masterplan is underway. An initial phase of the Newman Fenestration Replacement programme was recently completed and included the upgrade of three classrooms.

As part of an EU design team procurement process for the new UCD Confucius Centre, the winning design concept was selected in June 2013.

Significant donor funding has been secured for the development of a UCD International James Joyce Centre, at Newman House, and an architect has been appointed. Efforts continue to attract additional Government and philanthropy funding.

The occupation of the UCD Sutherland School of Law building is planned for autumn 2013. Innovation in design and construction ensures that the building has been designed to the highest standards in line with good sustainability practices. The introduction of a new water feature located adjacent to the building establishes a beautiful landscape oasis at the heart of the academic community. An installation of artwork pieces by Paddy Campbell, Rowan Gillespie and Catherine Greene is also planned.

Work has commenced to enhance accessibility, and improve pedestrian and cyclist movement between the UCD Student Centre and UCD Health Sciences Centre. The scheme will incorporate the introduction of new landscape layouts, outdoor event facilities, tree-planting, bicycle racks and attractive student social areas.

In November 2012, UCD President, Dr Hugh Brady signed a formal Partnership Agreement with the Sustainable Energy Authority of Ireland (SEAI). This supports UCD in its efforts to achieve the Government target of a 33% reduction in energy usage by 2020. Under the partnership programme, UCD will report annually on progress towards the 2020 target and this will form part of an overall public sector report to be published by SEAI each year.

UCD has achieved a 13.5% reduction in primary energy consumption since 2006, putting the University on course to achieve the 2020 target saving.

Among the energy projects undertaken in 2012 were some 'Smart Campus' initiatives, including additional web-based monitoring and control, district heating optimisation and a solar photovoltaic installation in the UCD Engineering and Materials Science Centre.

A new energy strategy and plan is being drawn up to sustain this progress. It will be aimed at embedding exemplar energy management into the day-to-day activities of the entire UCD community.

Table 1: UCD Energy Consumption

UCD Energy Consumption	2012/13
Electricity	33.4 GWh
Natural Gas	72.0 GWh
Biomass Heat	1.0 GWh
Transport Fuels	0.7 GWh
Gas Oil	0.8 GWh
Total Consumption	107.9 GWh

Awards and Honours

UCD Ulysses Medal

The highest honour that UCD can bestow, it is awarded to individuals whose work has made an outstanding global contribution.



Dr Denis Selkoe
18 September 2012, in recognition of his work to advance the understanding of Alzheimer's and Parkinson's diseases.



Kevin Roche
28 November 2012, in recognition of his contribution to world architecture.



Professor Noam Chomsky
2 April 2013, in recognition of his contribution to society as a leading intellectual and political activist.



Tom Murphy
15 June 2013, in recognition of his extraordinary career as an award winning playwright, novelist, theatre director and screenwriter.

UCD Foundation Day Medal

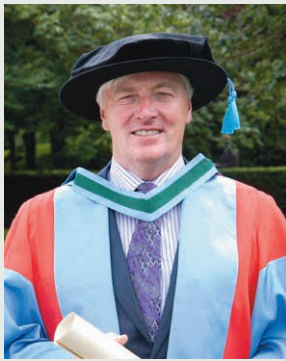
Awarded annually at the UCD Foundation Day Dinner to an alumnus in recognition of their outstanding achievements.



Dr George Moore
2 November 2012, in recognition of his role as one of the founding fathers of the data analytics industry, global business leader and generous philanthropist.

Awards and Honours

Honorary Degrees



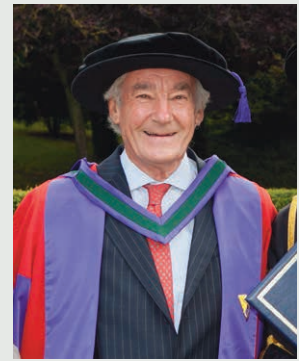
Pat Kenny
3 September 2012, broadcaster – Honorary Degree of Doctor of Science



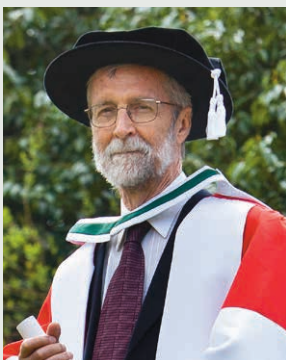
Kenneth Frampton
3 September 2012, Architect, academic and writer – Honorary Degree of Doctor of Science



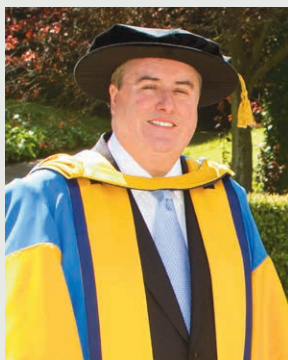
Owen Killian
3 September 2012, Chief Executive Officer, Aryzta AG – Honorary Degree of Doctor of Science



Bryan McMahon
4 September 2012, legal scholar and Jurist – Honorary Degree of Doctor of Laws



John McDowell
25 April 2013, Philosopher and academic – Honorary Degree of Doctor of Literature



Tom Lynch
6 June 2013, biotechnology entrepreneur – Honorary Degree of Doctor of Laws



Charles Serhan
6 June 2013, key opinion leader in the field of experimental therapeutics – Honorary Degree of Doctor of Science



Bob Crowley
15 June 2013, Ireland's leading stage designer – Honorary Degree of Doctor of Literature



Sinead Cusack
15 June 2013, actress – Honorary Degree of Doctor of Literature



Conor Mc Pherson
15 June 2013, playwright – Honorary Degree of Doctor of Literature



Patrick Mason
15 June 2013 – theatre director – Honorary Degree Doctor of Literature