

# UCD today

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## UCD still Ireland's favourite university



ELLIS O'BRIEN  
Director of Communication

**Despite the fall of almost 500 in CAO applications nationally, UCD has recorded another record in the number of students giving their first preferences to our degrees. Last year we broke through the 8,000 barrier and this year, as of March, we have recorded over 8,400 first preferences – a rise of around 1.3%, building on an increase of over 10% last year.**

Of course, there are ups and downs in the figures but the trends overall are positive.

Science (DN200), for example, is 23% up on last year, continuing the 5-year upward trend, while Engineering (DN150) rose by over 13%. Architecture (DN100), which was badly affected by the collapse of the construction sector, has held its own for the past three years and with a steady 158 first preferences, up 1.3%, compared to a national decline of 12%. The on-going strength of the UCD reputation is proving its worth.

The BA common entry (DN500) remains the largest single entry course in Ireland, with students choosing from 27 subjects within the BA suite. First preferences for this entry have remained relatively steady for the past three years. More information on our full range of degrees is on the UCD news website.

Over the past three years, UCD has cut the number of entry codes by 31, bringing us down to 57 pathways to our degrees in 14 programme areas. When entry codes are reduced, there is a risk that we will lose first preferences but there is also a reality that over-proliferation leaves students confused and unsure.

Indeed, by consolidating entry routes we have actually given our students greater choice. Formerly, for example, we had eight separate denominated engineering entry routes and expected our students to choose their specialism before they ever experienced the different subjects. Now they choose as they progress through their degree.

Small subjects can also suffer from annual fluctuations leaving students with a sense of reliance on luck or good fortune rather than achievement. Consequently, the merging of all of the languages under a single Commerce International (DN660) heading, has removed this fluctuation and given students greater opportunity to expand their linguistic and cultural experiences.

The universities' taskforce on entry to third level has yet to report but we can expect a recommendation to reduce entry routes in favour of fewer common entry routes. While commentators have suggested this would be "challenging", our experience shows that we are well up for the challenge.

## UCD thanks...

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This publication is also available online at [www.ucd.ie/ucdtoday](http://www.ucd.ie/ucdtoday)

Cover image: Boy in petticoat, Inis Meáin, County Galway, 1930. It is thought that young boys were sometimes dressed in skirts to protect them from fairy abduction. A belief existed that the fairies would choose boys before girls. (Photograph copyright National Folklore Collection, University College Dublin)





Pictured at the RIA Gold Medal presentation ceremony were (l-r): Dr Hugh Brady, UCD President; Prof. Luke Drury, President, RIA; Prof. Dermot Moran, UCD School of Philosophy; Prof. Maria Baghramian, Head of School, UCD School of Philosophy.

## Professor Dermot Moran awarded RIA Gold Medal

**At a ceremony in December UCD Professor of Philosophy, Dermot Moran, was presented with a Royal Irish Academy Gold Medal by the European Commissioner, Máire Geoghegan-Quinn. The RIA Gold Medals are awarded to two outstanding academics each year and are recognised as a truly national expression of celebration for scholarly achievement. Professor Moran was honoured alongside TCD Professor of Biochemistry, Luke O'Neill, in recognition of their outstanding contributions to the Humanities and Life Sciences, respectively.**

"These awards are hard earned. Each one is a testament to a lifetime of passionate commitment to the highest standards in scholarship. And they are well-deserved recognition of scientific excellence," said EU Commissioner, Máire Geoghegan-Quinn.

Professor Moran is one of Ireland's most distinguished philosophers (metaphysics and logic). He first received international acclaim for his pioneering work on the ninth-century Irish philosopher John Scottus Eriugena. In recent decades he has become equally acclaimed for his ground-breaking contribution to the understanding of the phenomenological tradition and for his efforts to mediate between the competing traditions of analytic and continental philosophy. Professor Dermot Moran has been a member of the Royal Irish Academy since 2003.

At the official award ceremony, President of the RIA, Professor Luke Drury, said the Academy's Gold Medals recognise two of Ireland's foremost contributors to the world of learning and science. Such public recognition of excellence is important, especially in the current climate, and the Academy is delighted to be able, with the generous support of the HEA and the Independent Group, to honour the recipients.

## New UCD, RCSI and TCD biomedical engineering alliance

**Researchers in the areas of engineering, medical technologies and science from UCD, Trinity College Dublin (TCD) and the Royal College of Surgeons in Ireland (RCSI) are entering into a new collaboration called the Dublin Biomedical Engineering Research Initiative (DBERI). The initiative was launched in December, with the aim of pooling resources to help progress new healthcare devices and technologies.**

Stem cell-based tissue engineering, regenerative therapies for orthopaedic medicine, valve repair devices for damaged hearts and imaging systems for neurology are some of the new technologies the initiative will accelerate. The DBERI will aim to build on more than 20 years of collaboration between UCD, the RCSI and TCD in bioengineering research and education.

It will provide a focus for collaborative research, education and commercialisation activities. DBERI will also aim to increase collaborations between the medical technologies industry sector, academics and clinicians.

## New Student Centre officially opened by An Taoiseach, Enda Kenny

**An Taoiseach, Enda Kenny visited UCD in late November to officially open the new UCD student centre. On his brief tour of the development An Taoiseach was shown some of the key facilities within the centre including: a 50 metre Olympic-specification swimming pool, a purpose built debating chamber resembling a mini-parliament named in honour of the late Dr Garrett FitzGerald, a 125-seat state-of-the-art performance theatre, a 90-seat multimedia 3D cinema, and a dance studio with a 'floating-floor'. The 11,000 sq metre building was developed with student funds following a student referendum in 2006.**

"This [development] shows a very strong sense of belonging and a sense of pride," said An Taoiseach, Enda Kenny. "Together these students voted for a shared vision for their university. A proud vision. A vision of their



At the UCD student centre official opening event An Taoiseach, Enda Kenny is introduced to UCD Ad Astra Elite Athlete students Annalise Murphy, Arthur Lanigan-O'Keefe and Claire Lambe by UCD Director of Sport, Brian Mullins.

university, UCD, having the finest student centre and sport facilities in Ireland."

"I'm sure [Garrett FitzGerald] would be immensely proud to have the new debating chamber named in his honour...because for Garrett, debate, and young people, belonged at the very heart of public life in this country," added An Taoiseach. The new debating chamber will become home to the UCD Literary & Historical Society (founded by John Henry Newman in 1855) and the UCD Law Society (established in 1911).

The new UCD student centre which also houses some of the latest sporting and training

facilities, strongly represented by the Olympic-specification swimming pool, is located at the centre of an 80 acre area of the Belfield campus known as the UCD Sports Precinct.

"This Sports Precinct will support Ireland's position as a leading player in international sport. It will support both UCD's and national strategies to promote greater participation in sport," said An Taoiseach.

Commenting on the significance of the occasion, UCD President, Dr Hugh Brady added "[Today] marks another great milestone in the evolution of UCD's Belfield campus."

## UCD hosts EU Presidency Policy Symposium “Feeding the World in 2050”

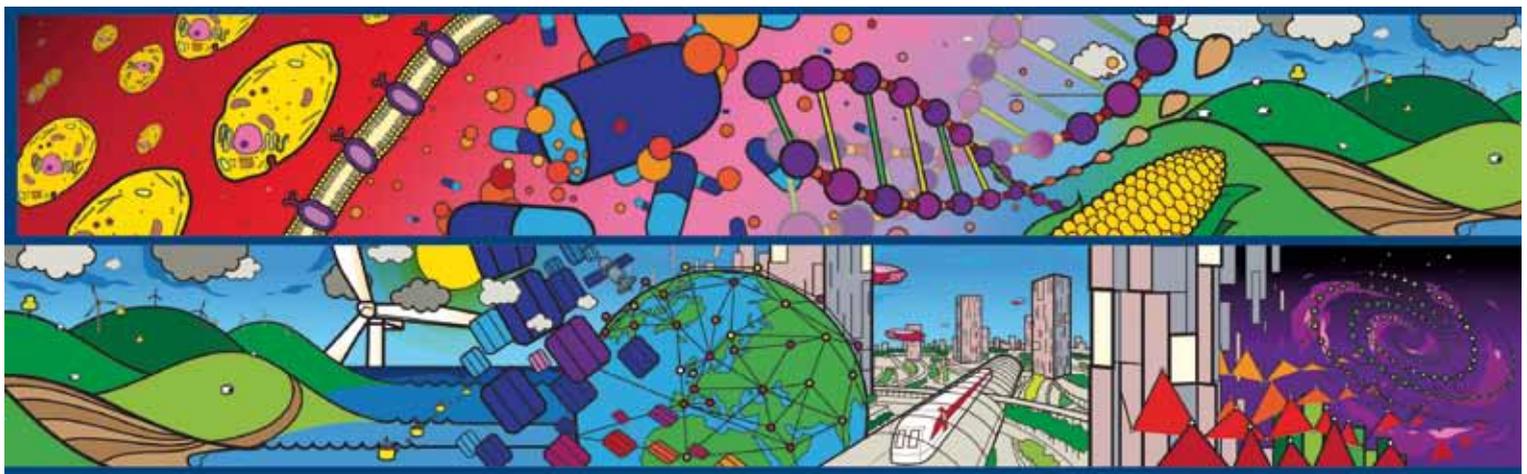
The global population will rise by 50% by the year 2050 with an additional 3 billion new mouths to feed while in the same period, it is predicted that climate change will cause agricultural output to fall by as much as 25% in at-risk areas.

The possible global actions and solutions to these problems were the subject of a two-day symposium, ‘Feeding the World in 2050’ which took place in UCD in January. The symposium was hosted by the UCD Institute of Food and Health, in association with the Irish Presidency of the Council of the EU, the Food Safety Authority of Ireland, and the Department of Agriculture, Food and the Marine. Attended by over 200 delegates from around the world, its aim was to stimulate policy makers to consider the issue of global food security and the role which Ireland can play in that area.

Opening the symposium, the President of Ireland, Michael D. Higgins said that chronic hunger is “one of the most serious challenges

facing the global community”. The President noted that “the principle source of hunger is the dire poverty exacerbated by gross inequalities that, scandalously, persist”. He stressed that “eradicating this poverty and its consequences” is the greatest moral and ethical challenge facing the global community today.

The symposium included sessions on topics ranging from biofuels and food and the implications of climate change for agricultural output, to malnutrition and population impacts on climate change. Session chairs included Dr Mary Robinson, the Mary Robinson Foundation; Mr Joe Walsh, Hunger Taskforce; Professor Tim Wheeler, University of Reading; and Professor Patrick Cunningham, TCD. The closing address of the symposium was given by the Minister for Agriculture, Food and the Marine, Mr Simon Coveney TD.



An impression by the artist James Earley of his piece of graphic art which can be viewed on a 130ft space adjacent to the UCD Science Centre.

## Graphic Art to mark the UCD Science Centre story

As preparations continue for the opening of the new UCD Science Centre in September 2013, a novel graphic art project has begun to bring the work of the centre to life. Entitled *Journey of Discovery*, this 130 foot piece of graphic art can now be viewed adjacent to the centre. Created by designer James Early, it depicts the crossover of ideas within the UCD Science Centre through a binding theme of connections.

On completion, the new UCD Science Centre will be home to 2,000 undergraduates, 1,500 Masters and PhD students and 1,000 researchers – the largest science community in Ireland, working together to provide innovative solutions to global problems. Spread over five stories the UCD Science Centre will contain 20 lecture theatres, 11 seminar rooms, 8 teaching laboratories and interactive learning facilities. It will foster excellence in research and teaching, and will provide a physical space that enables research collaboration across science, society and culture.

The facilities have been designed to support the lifecycle of the scientist – from school children and enthusiastic young undergraduates, to ambitious PhD students and technology entrepreneurs who will innovate to drive Ireland’s knowledge economy. The building will also offer dedicated public spaces where visitors can witness science and research in action and experience the joys of discovery for themselves.

Regular updates on the progress of the centre’s development are being posted at: [www.ucd.ie/science/ucd\\_science\\_centre.html](http://www.ucd.ie/science/ucd_science_centre.html)

## Silencing genes to produce specialised cells

Silencing particular genes in embryonic stem cells will allow their transition to more specialised cell types such as neurons, blood or heart cells. This cascade of molecular events that silence some genes by switching them from ‘on’ to ‘off’ is described for the first time by new research published in the December issue of *Nature Structural & Molecular Biology*.

Several UCD Conway Institute of Biomolecular and Biomedical Research scientists collaborated on the research study led by Dr Adrian Bracken from the Smurfit Institute of Genetics, Trinity College Dublin that explored the role of a ‘polycomb’ protein named PHF19. Describing the research

findings, Dr Bracken said, “We have been able to establish that PHF19 plays a critical role in silencing genes without which embryonic stem cells are incapable of differentiating into specialised cells”.

Like a sniffer dog, PHF19 tracks down those genes that are ‘switched’ on by recognising the scent, or epigenetic marker, H3K36me3. PHF19 then recruits additional polycomb and other proteins to the vicinity to replace this marker with another, H3K27me3 found only in genes that are switched ‘off’.

UCD Conway Institute scientists used a number of the Institute’s core technology facilities to explore the role of PHF19 in embryonic stem cells. Professor Brendan Loftus and postdoctoral fellow, Dr Amanda Lohan from the Genomics Core were involved

in mapping the gene targets of PHF19 using the ChIP-seq method.

Dr Gerard Cagney, PhD student, Guillermo Gambero and core technologist, Kieran Wynne carried out the mass spectrometry analyses in the Proteomics Core while Dr David O’Connell characterised the PHF19-histone interactions biophysically using surface plasmon resonance (SPR).

The findings of the collaborative study give new insight into the area of epigenetics, which tries to explain how cells in our bodies with exactly the same genes can function differently based on the unique pattern of genes being switched ‘on’ or ‘off’.

Dr Bracken believes that work may have relevance in regenerative medicine involving induced and tissue-derived stem cells and, more immediately, in cancer therapeutics.



Professor Uí Ógáin

**All walks of life, all over the world, believe in aspects of the supernatural. In story and song, Irish farmers, housewives, teachers, Travellers, students, islanders and city dwellers all told of the fairies, ghosts, and púcaí that were often believed to surround us.**

*The Otherworld: Music & Song from Irish Tradition*, is a captivating collection of Irish supernatural legends and photographic history accompanied by two CDs of music and speech. Edited by An tOllamh Ríonach Uí Ógáin, Director of the National Folklore Collection, UCD, and Tom Sherlock, a music programmer and traditional music promoter, it is a seamless and absorbing weave of story, song, custom and belief.

Today, the term “fairies” can carry connotations of small, winged, and benevolent creatures found primarily in children’s storybooks and cartoons. These are a far remove from the earlier ancient perceptions of the sí – that lived in the hills and former man-made forts of Ireland. The sí are found in early Irish literature and are said to have inhabited the mounds, the sea and other distant islands after the landing of Sons of Mil, an ancient parallel spirit race with pre-Christian origins. Later oral tradition associates them with angels who fell from Heaven during the great battle between God and Lucifer. They were said to intervene in human affairs, sometimes out of kindness, sometimes from malevolence.

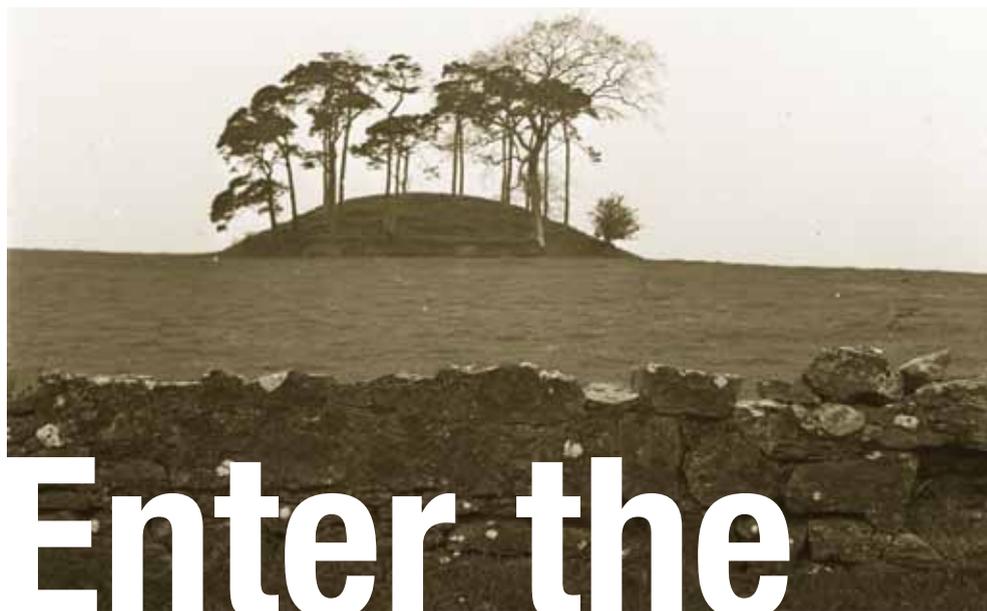
*The Otherworld* introduces the musicians who told or tell these stories and sang these songs, and reveals their depth of meaning. It also tells the story of the collectors and the magic that drew them to record these songs. Tom Munnely, a most prolific folk-song collector in Irish history, recorded thousands of songs and his work features heavily in the volume.

The fiddle and the human voice are the dominant instruments, but the uilleann pipes, the tin whistle, and the flute also appear. It is the sound of the Irish wind, earth, and sea, explains An tOllamh Ríonach Uí Ógáin. “Inevitably, tunes and songs relating to the Otherworld or to a parallel existence to that of the mortal world are mindful of the landscape - we encounter words such as ‘Ráth’, ‘Lios’ and ‘Sidheán’ in numerous Irish place names and hills such as ‘Cnoc Áine’ and ‘Cnoc Meá’ which may reflect otherworldly personages and encounters.”

One of the tunes, the lilt *Bá Phroclaise* (The Bruckless Drowning) is associated with the sinking of a fishing fleet off the coast of Donegal in 1813, in which between 300 and 500 men died. According to folk tradition, it was caused by Biddy Deveney, a ship-sinking witch who cursed the fishermen as revenge for their refusal to give her a supply of fish.

There are stories of the banshee (bean sí), the Irish supernatural death messenger, visiting Ringsend in Dublin to deliver news of a passing. Ghosts return to reveal the identity of their murderer. Songs, tunes, and stories about the changeling – a wizened or weak fairy left in the place of a person who they abducted, often a woman or child – are documented alongside tales of the púca, a supernatural shape-shifter who can appear in the form of a horse and take unwary and unwilling travellers on a wild ride.

Many of the stories are local legends of famed musicians who were said to have gained their



# Enter the Otherworld

talent, or learned a particular tune, from the sí; one such musician, Neillidh Boyle, composer of the fiddle tune “The Moving Clouds”, tells how he learned many tunes from them. Junior Crehan’s version of The Luthardán’s Jig also features, along with Crehan’s seemingly deep-seated belief that the fairies were a daily reality: “I mixed with them all my life,” he says.

At the time of publication, 16 of the book’s 38 contributors were still living. Uí Ógáin says that fairy beliefs, and belief in the supernatural in general, have continued: “These beliefs may not be as explicitly expressed today as they were formerly, but respect for the Otherworld in the form of fairylore, songs and related music is still in evidence.”

The impeccable scholarship which created *The Otherworld* – underpinned by a succinct bibliography – belies a gripping work of great depth, wide scope, and accessibility. It is undoubtedly a classic masterpiece that will have broad, and timeless appeal for both Irish and international audiences.

Uí Ógáin, R. & Sherlock, T. (eds), *The Otherworld: Music & Song from Irish Tradition*, Four Courts Press, 2012. Priced €25. All proceeds from the sale of the book will be donated to the preservation and development of the National Folklore Collection.

An tOllamh Ríonach Uí Ógáin was in conversation with Peter McGuire (BA 2002, MLitt 2007), a journalist with *The Irish Times*.

## ■ Ireland’s Hidden Treasure: The National Folklore Collection/Cnuasach Bhéaloidias Éireann

Hidden in the UCD Newman building is one of Ireland’s most significant cultural treasures, the National Folklore Collection (NFC). It is the cumulated efforts of dedicated folklore collectors in Ireland, dominated by the work of the Irish Folklore Commission, which gathered stories, songs, customs, and beliefs from all 32 counties between 1935 and 1970. The NFC’s collection is comprised of millions of pages of manuscript material, audio recordings and folk music and song, an extensive library, and a photographic and folk art collection.

The NFC has an extensive outreach programme. As well as regular engagement with the general public, the archive also works closely with the general public, county libraries, heritage officers, and local history associations and societies.

Despite tight resources, the NFC has maintained a prolific output. In recent years, this has included a photographic exhibition, *Through a Swedish Lens*, featuring photographs taken by a number of Swedes who visited Ireland in the early decades of the twentieth century; *Siansaí an Cheoil*, an exhibition based on the music and song holdings from the NFC; and *Béal Beo*, a hidden gem of an online resource which



Seán Ó Laoi and family, *An Cheathrú Rua*, Co. Galway

allows the public to access the recordings of the National Folklore Collection ([www.bealbeo.ie](http://www.bealbeo.ie)).

The NFC is an extraordinary archive, widely regarded as one of Western Europe’s greatest cultural collections, and one of great international significance. Its collecting work continues today, with the documentation of contemporary folklore including folk cures, stories of supernatural encounters with vampires and ghosts as well as fortune-tellers and psychics, children’s games, the celebration of Halloween and Christmas, and wedding and funeral traditions.

For more information on the National Folklore Collection, see [www.ucd.ie/folklore](http://www.ucd.ie/folklore)

*Pictured above: Fairy Mound, Lattin, Co. Tipperary. (Courtesy of the National Folklore Collection, UCD)*



## ■ New UCD Library Hub

**With more emphasis on collaboration, group projects and what is often referred to as “team based learning”, much of the learning for students today happens in informal environments.**

Now, 40 years since a library building opened on the Belfield campus, UCD Library has recently undertaken a range of refurbishment projects to provide high quality user spaces that meet these 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. Providing over 65 seats, the Hub

is available to all library users whenever the Library is open. It provides wired spaces for laptop users, Library PCs and individual work spaces, opening up a new dimension to how the student community engages with the library.

This renovated space was the first step in the redesign of the entrance level of the James Joyce Library. Upcoming phases of the development will include a new enclosed collaborative learning space. These spaces have been planned to meet the future needs of library users and are part of the larger planning of the Newman Joyce Precinct project. These renovated spaces have been achieved with the support of the University.

## ■ European award for Professor Brigid Laffan

**Professor Brigid Laffan, Jean Monnet Professor of European Politics at the UCD School of Politics and International Relations, has been presented with the 2012 Award for Outstanding Research on European Integration by THESEUS. This European network of thinkers, actors and ideas whose aim is to foster an open and constructive dialogue between academia and politics about the future challenges of Europe, honoured Professor Laffan with the award at a ceremony in December. The award, in recognition of Professor Laffan’s considerable contribution to research on European integration and the**

**strengthening of European studies as a discipline, was presented to Professor Laffan by Catherine Day, Secretary General of the European Commission.**

Professor Laffan is a leading expert on Ireland’s European policy. She has authored several publications, including monographs and numerous articles in refereed journals. She has taken part in several international research projects. Between 2001 and 2004, she co-ordinated a six country cross national research project on “Organising for EU Enlargement”, financed by the EU Commission’s Fifth Framework Programme. She has been part of two Networks of Excellence, CONNEX (2004-2007) and EU- CONSENT (2004-2009), and of the integrated research project on New Modes of Governance in Europe (NewGov, 2004-2007). She is also member of the editorial board of Journal of Common Market Studies, West European Politics.

For her merits as researcher and public person, she has been granted multiple distinctions – in 2005 she was nominated as member of the Royal Irish Academy, and in 2012 she received the Ordre national du Mérite from the President of the French Republic.



*An example of one of the first ever joint UCD TCD graduation scrolls, belonging to Masters in Development Practice graduate Purity Mwendwa, who is currently pursuing a PhD in UCD.*

## ■ Graduates receive first ever joint UCD TCD Degree

**The first ever joint degree between the National University of Ireland, University College Dublin and University of Dublin, Trinity College, the Masters in Development Practice, was conferred on twenty students at a ceremony held in December. The chancellor of the University of Dublin, Dr Mary Robinson, presented the parchment to the students. Dr Mary Robinson had given lectures to the class during the course of two years of intensive coursework and internships.**

The TCD-UCD MDP is part of a Global Association of MDP programs worldwide. The Global MDP Association is headquartered in the Earth Institute in Columbia University in New York. Throughout the course of their study, students spent full semesters in each university.

Programme leaders Professor Patrick Paul Walsh, UCD Earth Institute and Professor of International Development Studies, UCD School of Politics and International Relations and Professor Pdraig Carmody, Associate Professor in Human Geography, TCD are both delighted to have brought, for the first time, John D. and Catherine T. MacArthur Foundation funding to Ireland for the MDP start-up.



Professor Tony Fahey

**Nelson Mandela once said that education is the great engine of personal development. The South African president observed that through**

**education, the daughter of a peasant can become a doctor or the son of a farm worker a president.**



# Passing on the gift of education

Such aspirational notions ring truer than ever today, especially in nations with collapsed economies, such as Ireland, where learning in recent decades has been one of the key drivers of innovation, employment and success. Our institutions, colleges and levels of education attained by adults have been deemed as some of the best in the world, according to international findings.

Now, new research on the importance of learning in the family has shed light on the extent to which the development of a child is augmented through the level of a parent's education. The study even goes as far as to conclude that it is more important for a child's well-being that they have well educated parents than have parents who live together.

Family Relationships and Family well-being: A study of the families of 9 years olds in Ireland was conducted by a team of researchers from UCD, led by Professor of Social Policy, Tony Fahey, UCD School of Applied Social Science, on behalf of the Family Support Agency.

The research examined family relationships for 8,568 children, in particular with their parents, from data collected between 2007 and 2008 as part of the nationwide Growing up in Ireland survey. The findings suggest that the best way to enhance stability in families and potentially a child's development is through reducing educational disadvantage among parents. Questions suitably follow then on how adult education in Ireland is being progressed and resourced.

Professor Fahey explained: "No matter what you look at, education pops up as a very significant factor. What's new in what we discovered is that that educational effect is more important than things like the parents living together or not. That was one of the surprises. You would tend to think that parents who live apart are going to struggle to give their children the same upbringing as parents who live together."

Researchers measured the well-being of children in terms of their cognitive development, social emotional adjustment and physical health. The education of parents was considered on six levels, from primary school learning to post graduate studies. They found that mothers who had only lower secondary or primary education were three to four times more likely to have poorly performing children on reading and maths tests. Of course, the study notes that in some cases, parents with university degrees had children who

have difficulties in reading, but this is more likely to occur if either parent has had a lower level of education.

Similarly, mothers with no Leaving Certificate were two to three times more likely to have children with poor social and emotional adjustment. This includes where a child may have problems sustaining a relationship, with their self-image and their ability to engage with issues or people.

The research found few links between a parent's education and a child's health. "Even among parents of limited education, the majority of their children do quite well. It is if you look at the minorities who run into difficulties, whether it's on poor reading ability or poor social adjustment and not so much on poor physical health, [they] are greater the further down the social scale you go," added Professor Fahey.

But the study also reveals how a parent's own well-being is influenced by their level of education. Mothers with lower education levels were shown to have increased physical and mental health risks or problems and also were more likely to have a child before the age of 25. Better educated parents, on the other hand, were more likely to start child bearing at a later age and were also more likely to stay together as a couple.

Mothers were the main focus for the researchers as they were identified as the children's primary care giver in 98% of cases. Furthermore, no educational background was obtainable for the 20% of fathers who were not living with the mother.

However, the finding that has possibly thrown up the most surprises is again that the education of a parent may have more influence on a child's development than the relationship of the parents. Professor Fahey added: "One of the interesting things is that if you compare the lone parent and the two parent family where both have Leaving Certs, there's very little difference in the reading performance of the children. That is one of the surprising things. People often think that the family stability has an enormous influence on children's development but that isn't borne out by the information here."

Launching the report in January, Minister for Children Frances Fitzgerald TD noted that once education standards were equal or controlled for parents, that there was an absence of difference in the indicators of child well-being between children of two-parent married families, co-habiting families, step families and one parent families.

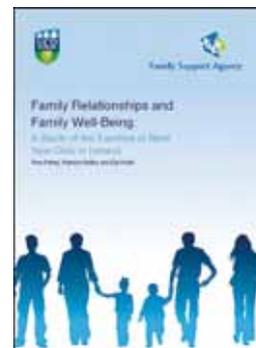
The next question that must be asked is how this thorough study could be used to influence public policy. According to Professor Fahey, the single best way to combat family problems is by tackling educational disadvantage in society. In recent years, education levels in Ireland have increased dramatically. An estimated 80% of adults now have Leaving Certificates while 50% go on to third level. Still, more can be done. Professor Fahey points to the benefit of DEIS schools - where select schools in disadvantaged areas benefit from additional teachers and other supports - and says there is evidence they are beginning to work. The Government-backed free pre-school year for children could also be expanded, he suggests.

Researchers will soon begin examining data about the same children who have now turned 13, to see what developments have taken place. Possible knock-on effects from the recession may have influenced children's lives and their development. "It will be interesting to see if there has been a deterioration [of their well-being]," added Professor Fahey.

He concludes: "When I was going to school, parents used to say about education that 'no one can take it off you'. An investment in education - and we should really think of education as something that happens from birth until people are well into adulthood - is a life-long investment. It doesn't fritter away, it doesn't disappear when times get bad. It is not only about money, it is also about the ability to communicate and sustain relationships."

Professor Tony Fahey was in conversation with Juno McEnroe (BA 2000), currently Political Reporter with the Irish Examiner.

The report can be downloaded from The UCD School of Applied Social Science, [www.ucd.ie/appsocsc/index.html](http://www.ucd.ie/appsocsc/index.html).



Family Relationships and Family well-being: A study of the families of 9 years olds in Ireland, a report recently developed by UCD School of Applied Social Science, on behalf of the Family Support Agency.

## Second UCD Garret FitzGerald Spring School

Garret FitzGerald had a pronounced impact on Ireland not only as an active politician but as a thinker and commentator. He had a deeply-rooted commitment to the role of the university, and to University College Dublin in particular where he studied and lectured, as well as the National University of Ireland of which he was Chancellor. Reflecting that relationship, an annual series of 'Spring Schools' named in his honour was initiated by UCD in 2012, co-sponsored by the *Irish Times*. The second Spring School in this series was held on 8th and 9th of February on the theme 'Ireland in Europe After 40 Years', a topic to which Dr FitzGerald devoted so much of his formidable energy and which remains central to Ireland's economic and social development.

The event was opened by UCD President, Dr Hugh Brady, and chaired by Professor Brian Nolan, Principal of the College of Human Sciences. The programme began with a talk by the Governor of the Central Bank, Professor Patrick Honohan, on the topic Garret's Europe and Ours – at the end of a week in which Professor Honohan had been centrally involved in negotiations on the replacement of the infamous 'promissory notes' associated with the former Anglo Irish Bank and with standard government bonds. The other speakers included Professor Brigid Laffan, UCD School of Politics and International Relations, on Garret FitzGerald: Positioning Ireland in the EEC; Professor Elizabeth Meehan, Queen's University Belfast and visiting Professor, UCD School of Politics and International Relations, who focused on UK perspectives on EU membership; the Danish Ambassador to Belgium Poul Skytte Christoffersen, who talked about the experience of Denmark, the other new member state from 1973; Professor Maurizio Ferrera of the University of Milan who examined welfare versus social investment approaches to social policy; Professor John FitzGerald of the ESRI who looked at economic aspects of Ireland's experience over the period of membership and Ireland's economic strategy in an evolving European context; and Dr Rory O'Donnell of the National Economic and Social Council who highlighted the relationship between success in Europe and domestic institutional reform.

## UCD researchers awarded SFI Investigator Programme Funding

Science Foundation Ireland (SFI) recently announced funding totalling €60million towards 85 pioneering research projects, 14 of which are based at UCD.

The SFI Investigator Programme is designed to support the development of world-class research and human capital in the areas of science, engineering and mathematics that demonstrably support and underpin enterprise competitiveness and societal development in Ireland.

Funded through the Department of Jobs, Enterprise and Innovation via SFI, the chosen projects were announced by the Minister for Jobs, Enterprise and Innovation, Richard Bruton TD and the Minister for Research and Innovation, Sean Sherlock TD.

According to SFI, the top-class projects focus on a range of national research priority areas identified by Government as key for developing new commercial products and services from scientific research, including ICT, health/life sciences, energy and manufacturing competitiveness.

"A central part of this Government's plan for jobs and growth is to ensure that this research is better targeted at turning the good ideas of researchers into good products and good jobs," said Minister Bruton.

Professor Mark Ferguson, Director General of SFI, said: "These 85 funded research projects were selected from 419 applications following rigorous competitive peer review and ranking by eminent international scientists. Each project has great potential to impact positively on Ireland's future: both economically and societally."

The individual research projects funded, range in size and scale from approximately €200,000 to €2.7million over the next 5 years and cover a broad range of scientific topics. For more details on the 14 UCD researchers awarded SFI Investigator funding, please see: <http://bit.ly/UFnxoh>



Pictured at the naming of the lecture theatres in honour of Catherine McAuley and Mary Aikenhead (L-R): Mr. John B Morgan, Chair of Board of MMUH; Sister Eugene Nolan, Sisters of Mercy; Sister Phyllis Behan, Sisters of Charity; Dr Hugh Brady, President UCD; and Prof Noel Whelan, Chair of Board of SVHG

## Double Celebration of the historical impact of Nursing

An event held in late November marked two occasions for the UCD School of Nursing, Midwifery and Health Systems: a naming ceremony for two lecture theatres and the launch of the Irish Nursing Journals collection.

Lecture theatres at the UCD Health Sciences Centre were named in honour of two founders of religious orders established to care for the sick poor in Dublin during the 1800s. Catherine McAuley was founder of the Congregation of the Sisters of Mercy, a religious order that provided a nursing service in the temporary hospitals that were set up in Dublin to cope with the Asiatic cholera epidemic of 1832. Later, they founded the Mercy Hospital in Cork (1857) and the Mater Misericordiae Hospital in Dublin (1861). The other honouree, Mary Aikenhead, founded the Religious Sisters of Charity. As early as 1816, the Religious Sisters of Charity were visiting the sick poor in their own homes in Dublin. In 1833 they

founded St Vincent's Hospital for the care of the sick poor.

"UCD is proud to honour two incredibly inspiring caregivers to the sick poor through the naming of these theatres today," said UCD President, Dr Hugh Brady. "By keeping the names of Catherine McAuley and Mary Aikenhead in clear view, we hope that our students and academic staff will take some inspiration from their remarkable leadership and charity."

The evening also marked the launch of the Irish Nursing Journals collection; historical back editions of early nursing journals belonging to the Irish Nurses and Midwives Organisation (INMO) which have been digitised by UCD as part of a research project co-funded by the Irish Research Council for the Humanities and Social Sciences (IRCHSS) and the INMO. Consisting of almost 400 issues of the INMO's journals, spanning the period 1925 to 1971, the collection is replete with articles and reports on important

healthcare and professional issues as well as union news and updates, photographs and relevant product advertisements. The digitised journal is publicly accessible now on: [www.digital.ucd.ie](http://www.digital.ucd.ie)

Liam Doran, INMO General Secretary said: "We in the Irish Nurses and Midwives Organisation are very proud of our collection of journals dating back to 1925 and we are delighted to be in a position to share the history of the organisation with the public in digital format."

At the event, several newly-established Aikenhead-McAuley Scholarships and Bursaries were also announced. These aim to support new UCD nursing and midwifery graduates to undertake a research master's degree at an early stage in their careers. For information on these bursaries and scholarships email: [nursing@ucd.ie](mailto:nursing@ucd.ie)

**Those who live or work in an urban environment are probably all too aware of how unsustainable development can have an impact on quality of life. Perhaps it's a long commute to work, or difficulty finding green, open spaces to recharge. UCD researchers are part of a major European project that's looking to plan for cities that are more resilient and would ultimately provide a better quality of life for the people living there.**

# Planning for better European city living

*The first meeting of the full TURAS consortium, Dublin City Wood Quay Venue, November 2011. Led by Professor Zorica Nedović-Budić (front row, fourth from left) UCD School of Geography, Planning and Environmental Policy, TURAS will examine mechanisms for transitioning to more sustainable urban neighbourhoods.*

"Cities and urban regions have become overwhelmed with challenges," explains Professor Zorica Nedović-Budić, UCD Professor of Spatial Planning and Head of UCD School of Geography, Planning and Environmental Policy. "These challenges are caused by climate change, overuse of energy and natural resources and also how we build our cities - that leads to overpopulation in some cases and at the other extreme urban sprawl and inefficient urban development."

Enter TURAS (Transitioning Towards Urban Resilience and Sustainability), an initiative that's looking at mechanisms to move to more sustainable practices and to promote urban resilience.

"We are focused on the question of transition - how do we get to the point that we could build better cities, sustainable environments, in an integrated way," says Professor Nedović-Budić, TURAS PI at UCD, noting that the key challenge is the integration.



*Visiting an experimental green wall at Helix Pflanzen GMBH, one of the nine SMEs in the UCD TURAS Project, Professor Darryl Newport, University of East London and Dr Bernd Eisenberg, University of Stuttgart, discuss how living walls might be used to progress green infrastructure in cities.*

"There are a lot of strategies but they tend to be compartmental - you have strategies looking at air pollution, water pollution and for dealing with flood-prone areas and urban regeneration, but each one is on its own. We have an ambition to see if we can move from this compartmentalised, sectoral view to a more integrated approach and also transition towards that approach."

UCD became involved in the project literally from the grassroots up. The Robert Emmett Community Centre in Dublin contacted staff at UCD School of Landscape Architecture about developing community gardens. That seed of a discussion eventually led to UCD successfully applying for funding under the European Framework 7 Programme for the TURAS project, an initiative that combines 30 partners and 10 study sites across Europe, with more looking to join.



Activity at the sites includes academics working with municipal authorities and with SMEs to look at issues that are common to many urban areas, such as energy use and efficient transport, and also at challenges that may be specific to that particular site.

Some are looking at the abandonment of buildings and sites, illegal planning activity on urban peripheries or, in sunnier climes, the formation of heat islands in built-up environments. Head-turning solutions include using roof-top gardens to promote both building insulation and urban biodiversity, and the use of 'living walls' to control urban heat, where trees are guided to grow intertwined as a lattice next to external walls.

So what is UCD doing in TURAS? Together with Dublin City Council and Dermot Foley Landscape Architects Ltd, researchers at UCD are working on several aspects, including a web-based geographic system that will allow the partners and general public to view various datasets which contextualize the project case studies.

"The geo-web will be embedded within the municipal websites," explains Professor Nedović-Budić, who is the leader of that particular work package of TURAS.

A year into the project, the first phase is being completed: "So far we have built a system of layers so a user can choose to look at information on a map online about aspects of a location such as transportation, population, employment, land use, development and ecologically significant areas." It will also incorporate a 'geo-wiki' to let users post pictures or comments online, she adds. "The second step is to develop specific tools for analysing, modeling, visualising and communicating the urban issues and processes, and following from this, developing new strategies and policies."

Meanwhile Dr Karen Foley from UCD School of Architecture and Landscape Architecture is leading the work package on collaborative planning and urban design. UCD also manages the TURAS project in partnership with the European Business & Innovation Centre Network.

Dr Marcus Collier, a research fellow at UCD School of Geography, Planning and Environmental Policy is the scientific co-ordinator for TURAS, and he recognises that the five-year

initiative is ambitious. While in Ireland we have managed relatively simple transitions in the past - going from not recycling to recycling, smoking in pubs to not smoking in pubs and carrying shopping in re-usable bags - designing resilient transitions in a complex urban environment is a bigger ask, according to Dr Collier. "The risk is that we might find that it is not possible," he says.

But the practical approach built into the project should give a valuable insight into whether the findings can be translated into a wider urban environment, notes Dr Collier. "TURAS involves each site carrying out demonstrations of key findings by local authorities and planners and I think we will get the kind of feedback that we need, to know about what is the reality of transitioning, and what is feasible."

**"There are a lot of strategies but they tend to be compartmental. We have an ambition to see if we can move from this compartmentalised, sectoral view to a more integrated approach and also transition towards that approach."**

Not everyone will feel the benefits of more resilient urban planning straight away, according to Professor Nedović-Budić, but there are potentially tangible economic rewards. "If you design communities that are resilient or less vulnerable to flooding or heat waves, or are efficiently utilizing land resources through compact design and urban regeneration, you are potentially saving substantial resources - monetary and other," she explains, adding that the challenges themselves are an inspiration. "Innovation happens by necessity. When we are faced with challenges and have limited resources to overcome them, that is when we become creative."

*Professor Nedović-Budić and Dr Collier were in conversation with freelance journalist Dr Claire O'Connell (BSc 1992, PhD 1998).*

To learn more about the TURAS project, including a full list of project partners, see: [www.turas-cities.org](http://www.turas-cities.org)



UCD Science first year students Lucy van Dijk (furthest right) and Caoimhe Joyce (to her left) pictured receiving Intel '2012 Women in Technology' scholarships at a ceremony in Intel HQ in September. The five scholarship recipients also included (from left) Catriona Clarke, NUIM; Nicole Fleck, DCU and Aine Cahill, TCD.

## UCD Quinn School of Business Celebrates 10 years

On Wednesday 5th December, UCD Business Alumni hosted its annual Budget Briefing & Christmas Drinks. The event was held in UCD Quinn School of Business on the Belfield Campus to mark the 10 year anniversary of the School, which first opened its doors on 9th October 2002.

Over 400 alumni attended to hear Professor Eamonn Walsh gave an entertaining and informative overview of the main highlights of Budget 2013 which had been announced earlier in the day. Lochlann Quinn, whose family were major donors to the School, spoke of the success of the School to date as well as his

pride in the building and the creation of an effective interior that was a great place to work. Professor Ciarán Ó hÓgartaigh, Dean of the Business School reflected on how the School, with its flagship facility, had become the leading Irish undergraduate business school.

**areas of food borne disease, lifestyle related diseases in humans, health damaging consumer behaviour and equine husbandry and performance related research topics.**

Qualified both as a veterinary surgeon and a medical doctor, Professor Wall was nominated for the role by the Minister for Transport, Tourism and Sport, Leo Varadkar TD.

"Patrick Wall brings a wealth of experience and expertise which will enable Horse Sport Ireland to develop further in the years ahead," said Minister Varadkar.

A keen horseman, Professor Wall said he was honoured by the appointment and looked forward to building on the work of his predecessor Joe Walsh, the former Minister of Agriculture. He outlined that equestrianism is different from the other sports under the Sports Council's umbrella in that it is also an industry. He considers that UCD's expertise in Equine Science, Veterinary, Sports Science and Business should be able to make a valuable contribution to both the industry and the sport.

## Examining rare disorders in Irish families

Ireland has a relatively high level of rare diseases, and sometimes the genetic variations that underlie them are not found anywhere else in the world. By analysing genes from Irish families with rare diseases, a Health Research Board (HRB)-funded study, co-led by Dr Sean Ennis, UCD School of Medicine and Medical Science and Dr Sally Ann Lynch, National Centre for Medical Genetics, has been identifying new genes responsible for rare disorders, and developing easier ways to diagnose conditions, screen for carriers and help genetic counseling. "If you want to have a direct impact on health in the Irish population, you need to be doing the research on the Irish families," says Dr Jillian Casey, a post-doctorate researcher at the National Children's Research Centre in Crumlin.

Working within families that have a history of a rare condition, the researchers have been looking for regions of DNA that are common to all of the affected individuals but that are not shared by their healthy relatives. This search has led them to identify a key eye development gene associated with a micro-anophthalmia where eyes fail to form normally. "We showed for the first time that changes in this gene can cause an isolated eye disorder," says Dr Casey. The team also identified another gene linked with familial glucocorticoid deficiency, which can result in poor growth and a high susceptibility to viral infections. The findings have led to the development of genetic tests for use in the clinical setting to help with earlier diagnosis and to identify carriers in affected families. Further research is also helping to develop a single screening test to diagnose an array of rare diseases present in the Irish population.

## Professor Patrick Wall appointed Chairman of Horse Sport Ireland

**Professor Patrick Wall has been appointed Chairman of Horse Sport Ireland, the governing body for equestrian sport in Ireland. Professor Wall, UCD School of Public Health, Physiotherapy and Population Science, was the first Chief Executive of the Food Safety Authority of Ireland and also served as Chairman of the European Food Safety Authority. His academic research interests include studies in the**

## German parliamentarians meet with UCD students

Wednesday, January 23rd saw seven UCD students benefiting from a face-to-face session with German parliamentarians. A delegation of seven members of the German Parliament's (Bundestag) Committee for European Affairs met with seven students of German from UCD School of Languages and Literatures for a question and answer Session in Belfield.

The parliamentarians were in Dublin for talks on European affairs under the auspices of the Irish EU presidency. The event was hosted by the School in conjunction with the German Embassy, which was represented by its Deputy Head, Peter Zingraf and First Secretary, Harald Seibel. The parliamentarians discussed the EU, Germany and Europe, Irish perspectives and German perceptions of the Irish situation with the students for over ninety minutes during their two-day visit to Ireland. The delegation, led by the Committee's chair, Gunther Krichbaum, CDU/CSU, also included Alois Karl, CDU/CSU, Veronika Bellman, CDU/CSU, Heinz-Joachim Barchmann, SPD, and Petra Müller, FDP.

## Professor Philip O'Connell appointed Director of UCD Geary Institute

The Governing Authority of UCD recently announced the appointment of Professor Philip J O'Connell as Director of the UCD Geary Institute, the university's leading research centre for economics and social sciences.

Specialising in labour market research, Professor O'Connell is the author of several books on work-related education and training, as well as a large body of research on quality of work and access to employment. He joins UCD from the ESRI where he was Head of Social Research and Director of the European Migration Network.

"Professor O'Connell brings valuable leadership experience to the UCD Geary Institute," said Dr Hugh Brady, UCD President. "His work in labour market research has a wide impact on national and European policy-making. He adds to the breadth of interdisciplinary research at the Geary Institute and will continue to extend the international reputation of the Institute, built up by Professor Colm Harmon."

## Internationalising the Association for Information Science and Technology

Change in a large organisation can be challenging. It requires leadership, vision and persuasion. Professor Diane H. Sonnenwald, School of Information and Library Studies, successfully led significant change in one of the world's largest professional organisations focusing on information science and technology, the American Society for Information Science and Technology (ASIS&T). As the 2012 ASIS&T President, Professor Sonnenwald proposed a new name for the organisation.

Addressing the membership she commented, "The word American in our name often makes it difficult for individuals outside the United States to receive recognition for belonging to and participating in ASIS&T. It also

fails to recognise the important contributions members outside the United States make to our association and to our discipline." Approximately 90% of the members voted in favour of the new name, the Association for Information Science and Technology, with the acronym ASIS&T staying the same. In addition under Professor Sonnenwald's leadership a reduced membership fee for individuals in developing nations was adopted. Sonnenwald noted that increasing international participation in ASIS&T will provide additional opportunities for all members to learn from and share expertise and knowledge with colleagues who have different expertise and knowledge. Professor Sonnenwald was the first person working outside North America to be elected president of ASIS&T. Not using the word 'American' in the organisation's name was first debated by members 40 years ago.



At a ceremony to name three theatres after UCD medical graduates including Dr James Ryan (1891-1970), Dr Kathleen Lynn (1874-1955) and Dr Patrick Hillery (1923-2008) Peter Wynne, a relative of Dr Lynn, and Prof. Bill Powderly, former Dean of UCD School of Medicine and Medical Science, are pictured with the commemorative plaques.

## UCD honours medics for historic role in Irish politics

At a ceremony in December, three lecture theatres in the UCD Health Sciences Centre in Belfield were officially named after Dr Kathleen Lynn (1874-1955), Dr James Ryan (1891-1970) and Dr Patrick Hillery (1923-2008).

Speaking at the ceremony, Professor Mary Daly, UCD School of History and Archives, said: "The careers of these three distinguished UCD medical graduates have a common theme in public service and the contributions that they each made to the Irish State. As such they reflect the central role that UCD has played in

the achievement of an independent Ireland and its subsequent history. These dedications are timely as we embark on events to commemorate the founding of the Irish State."

"The UCD School of Medicine has an incredible legacy in the Irish political arena said Dr Hugh Brady, UCD President "In naming the lecture theatres after Patrick Hillery, Kathleen Lynn and James Ryan we are keeping that legacy alive for current and future generations of students."

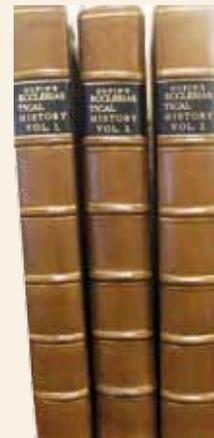
The naming of the theatres took place as part of a symposium for medical academics and clinicians from UCD and its partner hospitals. The symposium marked the contribution to medicine made by Professor Bill Powderly, former Dean of UCD School of Medicine and Medical Science and Chief Academic Officer of the Dublin Academic Medical Centre, which includes the UCD School of Medicine and Medical Sciences, the Mater Misericordiae University Hospital and St Vincent's University Hospital. Professor Powderly has left UCD to take up a new appointment in the United States.

## Protecting our Cultural Heritage: conserving UCD Library Special Collections

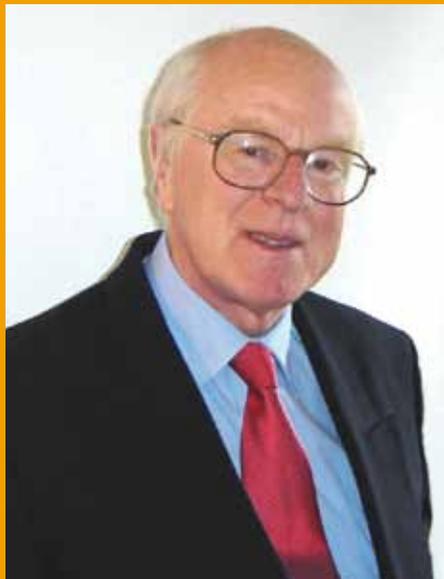
In recent years UCD Library Special Collections has instigated a programme of binding and conservation for rare books and manuscripts. Certain books are in need of repair due to the materials and methods used in their creation, while past storage conditions, frequent use and incorrect handling practices have resulted in other books and manuscripts needing repair.

Items in the collection are prioritised for conservation based on a number of criteria, such as rarity, frequency of use, date of publication, place of printing, monetary value of the item and provenance.

As UCD does not have a conservation laboratory, items are sent to binderies such as Antiquarian Bookcrafts and the Ox Bindery. Last year, for example, early Dublin printings which had been withdrawn from use were sent to Antiquarian Bookcrafts for repair and are now available to library users again. Items from the O'Curry, Morris, Ó Lochlainn and Ferriter manuscript collections had been withdrawn from use because of their fragility. UCD library intends to carry on the rebinding programme during 2013 and plans to re-bind items including a very rare set of acts from the parliament of James II of 1689.



An example of Special Collections manuscript restoration work commissioned by UCD Library, before and after. Issues of Dupin's Ecclesiastical History which were re-backed in calf, with board corners reinforced, initial leaves repaired using Japanese tissue and new title labels.



Professor Michael (Joe) Duffy, Conway Institute Clinical Fellow, who recently received the 2012 Abbott Award of the International Society of Oncology and BioMarkers

## International award for Conway cancer researcher

**UCD Conway Institute of Biomolecular and Biomedical Research Clinical Fellow, Professor Michael (Joe) Duffy, UCD School of Medicine & Medical Science and St Vincent's University Hospital, is the recipient of the 2012 Abbott Award of the International Society of Oncology and BioMarkers (ISOBM). This award is made annually to investigators who have made an outstanding contribution in the field of basic or clinical oncology.**

Professor Duffy has made several important contributions to cancer research and has published in excess of 100 papers in international peer-reviewed journals on this

topic. One of his main contributions was the development of a test for identifying patients with breast cancer who may not need chemotherapy. This test, which involves measurement of the urokinase plasminogen activator (uPA) marker, is now recommended for clinical use by several expert groups including the American Society of Clinical Oncology.

Professor Duffy presented his award winning plenary lecture entitled 'The War on Cancer: Are We Winning?' at the 40th ISOBM Anniversary Congress in Jerusalem, Israel during October 13- 17, 2012.

Previous winners of this award have included R. Bast (Houston) for the discovery and pioneering studies on the ovarian cancer marker, CA 125; P. Gold (Montreal) for the discovery and early clinical studies on CEA; R. Levy (Stanford) for his work on the immunotherapy of cancer; G. Abelev/Y Tatarinov (Moscow) for their discovery of AFP and D. Goldenbeg (Newark) for his work on radiotargeting of tumours.

## New Mathematics and Science Teacher Education Degree in UCD

The UCD College of Science, School of Education and School of Mathematical Sciences recently announced a new and innovative programme in Mathematics and Science teacher education, which will be offered to incoming DN200 Science students from September 2013. The five-year programme, consisting of a three-year BSc in Mathematics and Science, and a two-year MSc in Mathematics and Science Education, was announced after it received accreditation from the Teaching Council in December 2012. Students from the programme will graduate as fully-qualified post-primary teachers in Mathematics and either Applied Mathematics, Biology, Chemistry or Physics.

"Science and maths teachers have a fundamental role to play in helping Ireland meet an ever-increasing demand for graduates in the STEM [Science, Technology, Engineering and Mathematics] subjects. Our aim is to graduate well-qualified, enthusiastic and innovative science and maths post-primary teachers, who will be responsible for enthusing the next generation about the enormous potential of

maths and science" said Professor Joe Carthy, Dean of Science.

The design of the programme is unique among teacher education programmes in Ireland. DN200 Science students have the flexibility to explore Education modules in the first two years of their studies, enabling them to make an informed decision about whether to pursue an education pathway from Stage 3. School placements are incorporated into the

programme from Stage 3, with two year-long placements in Stages 4 and 5 designed to give the student an experience of the wider school context. The Review Panel for the programme, set up by the Teaching Council and chaired by Professor Aine Hyland, commended UCD "for devising an innovative programme which has the potential to become a model of best practice in initial teacher education".

# Winds of change:

using systems analysis to optimise Ireland's energy grid



Dr Andrew Keane

**UCD engineering graduate and Foundation Day Medal recipient (2010), Dr Eddie O Connor, founder of Airtricity and of Mainstream Renewable Energy, has a vision for Ireland as a major supplier of green energy. He is pressing ahead with plans for an 'energy bridge' between Ireland and Britain to be built at an estimated cost of €13bn. The country's fortunes could be greatly improved as a result of the project and similar initiatives.**

Elsewhere however, important steps are being taken to maximise the use of the country's resources and existing infrastructure. Researchers at Irish third level institutions have joined forces to explore ways of ensuring that this infrastructure is best adapted to cope with a future centred on renewable energy sources, with a central role being played by the UCD-based Electricity Research Centre (ERC).

Founded in 1991 by Mark O'Malley, Professor of Electrical Engineering at UCD, the industry-university research collaboration is based in Electrical Engineering at UCD with an Energy Economics branch at Trinity College Dublin (TCD). Its mission is to overcome challenges related to energy provision and climate change, and to build human capacity in this vital sector. Among the many industry collaborators of the ERC are: Bord Gáis, Bord na Móna, the Commission for Energy Regulation, EirGrid, ESB International, ESB Networks, Intel, SSE Renewables, and Viridian.

The Centre recently produced a report on the potential of renewables as a source of electric energy in association with the Department of Communications, Energy & Natural Resources, which concluded that upwards of 40% of our electricity production could be met by renewable energy sources.

The growing centre comprise of five academic principal investigators, each of whom heads up a team of researchers. Dr Andrew Keane, SFI Charles Parsons lecturer in Electrical, Electronic and Communications engineering, has headed up a team of eight in the 'Systems Analysis Group' for the past three years.

The son of an ESB engineer, Dr Keane spent time working at ESB Networks while conducting research for his PhD at UCD and served as visiting research fellow at the Institute for Energy Systems at the University of Edinburgh in 2008.

"Our focus is on the physical grid, on how to integrate new technology into the grid, making best use of existing infrastructure." With this in mind, advanced mathematical modelling is required.

In the past, there was scepticism about the utility of wind energy, however, Dr Keane believes that the ESB and EirGrid among others are adopting a progressive attitude these days.

Nevertheless, big challenges remain. Ireland's island system is not synchronised with the neighbouring UK system. "This presents unique technical challenges for Ireland in terms of cost and the difficulty of providing interconnection," notes Keane.

Ireland's island status, however, also means that we benefit from "world beating wind penetration on our own grid." Fully harnessing this rich wind resources is the name of the game, he believes. This includes making best use of the existing network of wind farms, minimising the need for new pylons – usually resisted by people living nearby – and maximising the wind connected into the national grid. Having spent the summer of 2012 in Glasgow working for a firm, Smarter Grid Solutions, which is examining the commercial deployment of wind control solutions on the grid and experiencing their project in the Orkney Islands, Dr Keane is well placed to explore the challenges of wind power. "We are trialling the use of wind farm technology with ESB Networks. It is around the control of voltage." Without such controls, there will remain barriers to the further integration of wind into the network.

Dr Keane's group operates independently, securing its own funding, establishing its own network of contacts. It has received backing from the US based Electric Power Research Institute and is working with the EPRI on two "world leading field trials".

One deals with the control of wind farms, the second concerns the deployment of electric vehicles. In the case of the electric vehicles, the group has been looking at the problems for the network that can arise where several users access the grid at the same time. "We have developed control technology to schedule the charging of vehicles over the night time, in the least costly fashion, ensuring that no upgrades to the network are required," says Keane. While the use of electric vehicles remains restricted to

date, Dr Keane believes that Ireland must think ahead to a period when future take up is significant.

Dr Keane believes that the solutions being developed at the ERC can be applied to other alternative energy sources such as solar panels or electric heating.

"Our work is generic. We will be able to model the grid to manage these technologies.

The ERC is very much a collaborative operation. We are working with a group in Trinity College – in energy economics. We take a technical outcome and look at the policy implications from an energy economics perspective," which means for example that a voltage control solution can be examined from the point of view of its impact on the societal bottom line.

Elsewhere within the Centre, complementary activity is underway. Dr Terence O'Donnell has recently joined the ERC. His focus is on wind turbines and their electronic components. "What you have are lots of pieces of the jigsaw", says Keane.

"The grid is too large and complex to model in its entirety. You have to slice it down into pieces to capture answers to different questions."

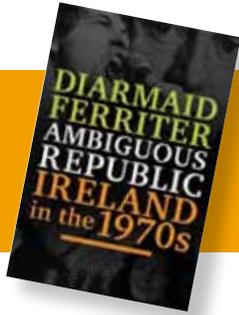
As for long term goals, he notes; "UCD has developed great capacity across the whole discipline of energy research. There are growing links with industry. We are pushing for further industry engagement and we are looking to the European Union. We already have some EU funding."

*Dr Andrew Keane was in conversation with Kyran Fitzgerald, (BA 1976), a freelance journalist.*



Mitsubishi i-MiEV used for the UCD ERC, EPRI, ESB Networks electric vehicle field trial in Clonskeagh

# Books



## A defining era

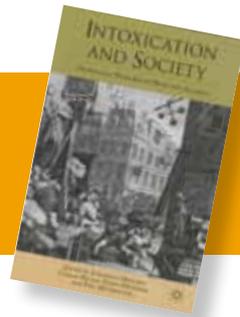
**It's not surprising that Diarmaid Ferriter's *Ambiguous Republic: Ireland in the 1970s* makes it onto journalist Richard Fitzpatrick's "top tomes" for 2012 as Ferriter's description of Ireland in the 1970s manages that sometimes elusive feat of presenting well-researched historical fact in prose that is accessible and engaging to the general reader.**

Reading this book helps place politics and music, societal norms and fashion excuses in context. As you live through a decade you can't really predict its consequences. That task is left to the historian who can look back and analyse why artists wrote their lyrics, how Europe actually empowered Irish women, and where the rural-urban divide really lay.

Research for this book, published by Profile is extensive – spanning not just archival papers of many politicians and their parties, but media publications from the decade including *Hibernia* and *Magill*. It was a decade when *The Troubles* erupted and spilled over the border, leaving citizens reeling from atrocities such as the killing of Lord Louis Mountbatten and bombing of Dublin and Monaghan. Right in the middle of the decade, Ferriter points out, former Taoiseach and President Eamon De Valera died. "He was the most dominant and polarising politician of his generation".

Many of the characters who emerged in the 1970s continued to influence Irish society in the next three decades. Ferriter writes that in this decade of economic and political turmoil there were some who demonstrated a sense of realism that would serve as good advice today. In 1973 "TK Whitaker,.. pointedly referred to the need for a realistic acceptance of Ireland's status: 'Nobody so loves us as to want us in the EEC on our own terms.'"

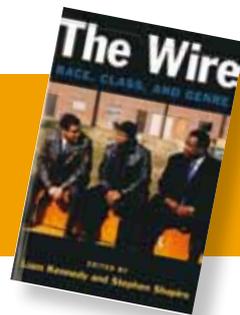
**"That task is left to the historian who can look back and analyse why artists wrote their lyrics, how Europe actually empowered Irish women, and where the rural-urban divide really lay."**



## A measure of the effects of intoxicants

**Intoxicants, substances which alter the mental and psychological state of the person, are a modern obsession. Issues of licensing, binge drinking, addiction, secondary smoking and the categorisation of drugs, all testify to the central place of intoxicants in contemporary society.**

*Intoxication and Society: Problematic Pleasures of Drugs and Alcohol* is a new book which sets out to supplement the current discourse surrounding intoxication with a more nuanced appreciation of the history and nature of what is very much a multidimensional problem. Published by Palgrave Macmillan, it employs an interdisciplinary framework, including contributions from leading academics in sociology, law, anthropology, history, literature, neuroscience and social psychology; resulting in a subtle historical and contemporary rereading of the social construction of intoxication. Edited by Professor Jonathan Herring, University of Oxford, Ciaran Regan, Professor of Neuropharmacology at UCD and a Fellow of the UCD Conway Institute of Biomolecular and Biomedical Research, Dr Darin Weinberg, University of Cambridge and Professor Phil Withrington, University of Sheffield, it provides further basis for analysis as society continues to respond to the troublesome pleasures that intoxicants provide.



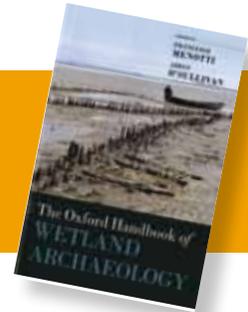
## Re-wiring perceptions of race and class

**From drug trafficking to the city bureaucracy of Baltimore, *The Wire* took the formula of the American police drama and re-appropriated it for an analysis of the modern American city. Since its initial run (2002-08) ended and it took on an afterlife in DVD sales and discourse, the show has been routinely acclaimed as the best drama television series of the past decade. A new collection of essays delves into the 'multiple meanings and arguments' of this hit US television programme.**

*The Wire: Race, Class and Genre* recognises the originality and progressive features of *The Wire*, and also poses critical questions about its

design, message and appeal. In particular, the volume sets out to examine in what ways and with what effects the show uses the genre of the police procedural to comment on 'the nature of the American city' and 'the American experiment'.

Edited by Liam Kennedy, Professor of American Studies and Director of the UCD Clinton Institute for American Studies and Professor Stephen Shapiro, University of Warwick, the essays demonstrate just how restricted the grammar of race is on American TV and related media and of the normative codings of race across urban narratives, from documentary to entertainment media.



## The far-reaching world of wetland archaeology

**Coastal marshes, bogs, lakes and rivers provide enormous potential for scientific exploration and shedding light on our past. These waterlogged, anaerobic environments can, through a combination of multidisciplinary scientific methods and techniques, foster archaeological and environmental investigation of the past and have been responsible for some of the most spectacular archaeological discoveries in the world.**

As archives of past environmental and cultural change, wetlands are almost unparalleled in the quality of evidence that they can produce. The potential of wetland archaeology can be glimpsed through a list of its varied scientific approaches: archaeobotany, insect analysis, palaeoecological reconstruction, geoarchaeology and soil micromorphology, ancient DNA, palaeoclimatology, radiocarbon dating, dendrochronology and lacustrine varve dating.

This extraordinary record of scholarship is reflected in the most comprehensive survey of global wetland archaeology ever published: *The Oxford Handbook of Wetland Archaeology*. Edited by Francesco Menotti, Professor of Archaeology, Institute of Prehistory and Archaeological Science, Basel University, and Dr Aidan O'Sullivan, Senior Lecturer, School of Archaeology, UCD, it is a key resource for anyone interested in wetland archaeology, its history and practice.

Through concise essays written by some of the world's leading scholars in the field, the volume, published by Oxford University Press, describes the key principles, methodologies, and revealing results of archaeological investigations of wetland environments, past and present. Opening with a detailed introduction by the editors, the Handbook is divided into seven parts and contains 54 essays and over 230 photographs, figures, maps, and graphs.

By encompassing such an array on perspectives, the Handbook helps to ensure that wetland archaeology can continue to throw light on the diversity and meaning of the human condition across the world.

## ■ The USA & Northern Ireland – a diplomatic perspective

On Saturday 17 November, the UCD Clinton Institute for American Studies co-hosted with Professor Maurice Bric, UCD School of History & Archives, the latest instalment in its series of colloquia on the relationship between the United States and Northern Ireland. Featuring several high ranking officials, the colloquium drew together a series of diverse perspectives on how the issue of Northern Ireland impacted upon the relationships between the United States, Ireland and the United Kingdom for four decades.

The first panel reunited former Ambassador of the United Kingdom to the United States, Mr Peter Jay, with former Irish Ambassador to the United States, Sean Donlon, to reflect on their shared time in Washington during the late 1970s. Their talks illustrated how complicated the issue of Northern Ireland was for the two nations during this period, although the over-riding message was how deep the co-operation went between the two Embassies, even if their respective governments did not see eye-to-eye.

The second panel featured Lord Kerr, who served as the UK Ambassador in Washington during the latter years of the John Major government, along with Dr Kevin McNamara, the former Shadow Secretary of State for Northern Ireland and Professor Andrew Wilson from Loyola University Chicago. Lord Kerr spoke of the organisation which went into the earliest visit of President Bill Clinton to Northern Ireland. Dr McNamara provided insight into the views of the Labour Party prior to the arrival of Tony Blair as

party leader in 1994, before Professor Wilson spoke on Unionist attempts to gather influence in the United States, particularly through their “Operation USA” tour.

Former Irish Ambassador to the United Kingdom, Daithí O Ceallaigh joined Sir Jonathan Phillips, the former Permanent Secretary to the Northern Ireland Office, and Mr Paul Quinn, a Washington DC-based lawyer and highly prominent Irish-American policy adviser for the final panel. Drawing from years of experience, O Ceallaigh emphasised the importance of the Irish in Britain, the “east-west” strand of the 1998 Good Friday Agreement. Sir Jonathan spoke to the Northern Irish dimension from the perspective of the Northern Ireland Office before Mr Quinn spoke of his own career as a policy adviser to a series of prominent American politicians. Journalist Deaglán de Bréadún offered his comments on the final panel before Professor Ronan Fanning provided closing remarks.



Dr Chandralal Hewage, UCD School of Biomolecular and Biomedical Science and Conway Institute (Chairman EUROMAR 2012) with Prof. Lucio Frydman, Weizmann Institute of Science, Israel (Chairman EUROMAR Board of Trustees) pictured during the EUROMAR 2012 conference held in Belfield.

## ■ Topping-Out ceremony for new School of Law building

The Topping-Out ceremony of the new Sutherland School of Law building was held recently, with Peter Sutherland, SC, and UCD President, Dr Hugh Brady, in attendance, as well as various donors to the new building, and the School of Law Development Council.

Following a tour of the site, Peter Sutherland commented on the marked contrast between the new building and Earlsfort Terrace, where he himself studied. He also reiterated the importance of education to the continuing development of the country, and how this new state-of-the-art facility is a major statement of UCD's commitment to education.

Dr Hugh Brady thanked all of the donors, particularly Peter Sutherland and also those University staff involved in bringing the building to the current stage. He paid tribute to the former Dean of Law, Professor Paul O' Connor, for his vision in initiating this important project and to Professor Imelda Maher for her stewardship of the project as Academic Director.

UCD Sutherland School of Law will be the largest and most diverse Law School in Ireland. It will allow for the creation of new initiatives, the enrichment of the educational environment in the student body, the development of working partnerships with practising legal professionals, and the establishment of a major, well-regarded and authoritative presence in the international legal community. The building is on schedule to welcome students in September 2013.

## ■ NCPOP Study on Older People in Residential Care

The National Centre for the Protection of Older People at UCD recently launched the report of a major study on staff-resident interactions and conflicts in residential care settings for older people. The aim of the study, which was conducted with funding provided by the Health Service Executive (HSE), was to measure the extent to which staff working in residential care homes experienced conflict with residents, observed potentially neglectful or abusive behaviours towards older people, or themselves engaged in neglectful or abusive behaviours towards residents in their care.

The study was based on a survey of over 1,300 registered nurses and healthcare assistants from 64 nursing homes (69% private nursing homes, and 31% public and voluntary) in the Republic of Ireland.

The study found that staff working in residential settings for older people reported that they had both observed and had perpetrated acts of neglect and physical, psychological, financial and sexual abuse. Approximately 57% of staff reported that they had observed one or more neglectful acts and 27% reported that they had been involved in at least one neglectful act within the preceding year.

Commenting on the findings, the lead author of the study, Dr Jonathan Drennan, UCD School

of Nursing, Midwifery and Health Systems said: “when compared with international research into staff-resident interactions and conflicts, this study found that the extent of staff-reported abuse in residential care settings in Ireland was lower than that reported in other countries.”

“In addition, a number of initiatives and safeguards have been put in place by the HSE and HIQA to protect older people receiving care in the residential sector. However, as there is evidence that older people receiving care in the nursing home sector in Ireland do experience neglect and various forms of abuse, there is a need to intensify efforts to protect older people receiving care through multi-faceted approaches.”

“At a national level all agencies that have an interest in the protection of older people should continue to be involved in the further development of strategies that both prevent and identify the abuse and neglect of older people receiving residential care,” added Dr Drennan.

Mr Frank Murphy, Chair of the HSE National Elder Abuse Steering Committee, commended the NCPOP on the research. “The HSE commissioned this report to further enhance our understanding of elder abuse in Ireland and on the factors that can lead to abuse. Understanding the experiences of staff and their unique perspective helps us to develop effective preventative programmes.” he said.



Prof. Marcus Textor, ad hominem Professor, ETH Zurich, recipient of the 2012 Excellence in Surface Science Award at the BioInterface Conference, held in Belfield in October.

## UCD first overseas host for annual BioInterface Conference

UCD hosted a major international medical device conference in October for the US-based Surfaces in Biomaterials Foundation ([www.surfaces.org](http://www.surfaces.org)). This was the first time that its annual BioInterface conference was held outside of the United States, since it was established in 1990.

The conference, held in the O'Reilly Hall, focused on research at the interface between medical devices and the bio environment. Among the broad range of topics covered were biomaterials, surface modification of devices, wound healing, drug delivery and regulatory issues. The majority of the 190 attendees were from industry, both Irish and overseas. The local organiser of the conference was Dr Denis Dowling, UCD School of Mechanical and Materials Engineering. During the conference the Excellence in Surface Science Award was presented to Professor Marcus Textor, ad hominem Professor, Swiss Federal Institute of Technology (ETH), Zurich. The award honoured his enormous contributions to the understanding of surface science at the biointerface.

## Enterprise Ireland award for UCD Food Innovator

Professor Dolores O'Riordan was presented with the Enterprise Ireland 2012 Lifescience Commercialisation Award by Seán Sherlock TD, Minister for Research and Innovation, during the Enterprise Ireland 2012 Big Ideas Showcase in November.

Professor O'Riordan was presented with the award in recognition of her exemplary contribution to innovation in the food sector through collaboration with industry. Professor O'Riordan is Deputy Director of UCD's Institute of Food and Health, and a researcher in UCD School of Agriculture and Food Science. A teaching advocate in Food Science, she is highly regarded by industry and academia alike, having delivered numerous commercial projects for industry as well as being a Professor with an impressive publishing and patenting record at UCD.

She is also a principal investigator in Food for Health Ireland, a large-scale collaborative research programme funded by Enterprise Ireland and four of Ireland's largest dairy companies. The primary objective of this programme is to identify functional ingredients from milk which can form the basis of new products with defined health benefits for consumers.

## UCD spin-in signs contract with European Space Agency

Enbio, the UCD surface technology spin-in company, has secured a €500,000 contract with the European Space Agency (ESA). The contract, secured with support from Enterprise Ireland which is the co-ordinating body for ESA in Ireland, will enable Enbio to optimise a proprietary surface treatment for use as a 'sunscreen' to better protect satellites as they travel in space. The contract will also enable Enbio to establish its first manufacturing facility at its headquarters at NovaUCD.

In its new manufacturing facility Enbio will use its patented technology platform, CoBlast, to produce unique 'black' surfaces, which it will then deploy on critical internal and external surfaces of satellites. These 'black' surfaces, called 'SolarBlack(s)', uniquely combine extreme thermal and ultra-violet radiation stability, robustness and electrical conductivity characteristics. These surfaces will provide satellites with a more robust surface than is

currently available to counter the intense solar radiation encountered in space, thus better protecting satellites and their payloads while they journey through space.

Enbio is also currently collaborating with Astrium, the prime contractor for the Solar Orbiter satellite mission to the Sun. This challenging ESA science mission is aimed at studying Earth's nearest star and is due for launch in 2017.

## UCD Smurfit School moves up in Financial Times Global MBA Rankings

The 2013 Financial Times Top 100 Global MBA Rankings places the UCD Michael Smurfit Graduate Business School full-time MBA programme at number 64 in the world. The ranking is based on alumni success, school and programme quality, and faculty research capabilities.

Maintaining its status as Ireland's leading centre of excellence in business education, the School is the only Irish business school listed in these rankings. It is also among less than 50 schools worldwide that have been consistently ranked in the top 100 over the last fourteen years. In the rankings, the School was also ranked 18th among the top MBAs in Europe. UCD Business School is the only business school in Ireland, and one of less than 60

worldwide, to hold the 'triple crown' of accreditation from the three centres of business and academic excellence; EQUIS (Europe); AACSB (US); and AMBA (UK).

"We are delighted that once again our MBA is ranked with the top business schools in the world – the only Irish business school to do so," said Professor Ciarán O hÓgartaigh, Dean, UCD Business School.



The UCD Symphony Orchestra commenced celebrations of its 10th anniversary season with a sold-out performance of Beethoven's Choral Symphony at the National Concert Hall in Dublin 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) to form a combined choir of 130 voices, plus four soloists of international standing. The concert also included the premiere of a specially commissioned work, *Toile Brûlée*, by UCD alumnus Dr Séan Clancy.

## 11th Synthesis and Chemical Biology Symposium

Organised in a partnership between UCD, Trinity College Dublin (TCD) and Royal College of Surgeons Ireland (RCSI) Schools of Chemistry under the Centre for Synthesis & Chemical Biology umbrella, a symposium recently took place entitled '*Recent Advances in Synthesis and Chemical Biology*'. This annual event, the eleventh since its inauguration in 2001, was held in RCSI and welcomed high-profile speakers from around the globe. Professor Pat Guiry, Head of School, UCD School of Chemistry and Chemical Biology and Director of the Centre for Synthesis and Chemical Biology, co-hosted the symposium.

The talks began with Professor Nick Farrell from Virginia Commonwealth University with his address on '*How Does Platinum Enter Cells? A Role for Heparan Sulfate*

*Proteoglycan Mediation*'. He was followed by Professor Ben Davis, University of Oxford who spoke about '*Sugars and Proteins*'. Professor Jeffrey Bode of ETH Zurich explored the topic of 'Chemical Protein Synthesis with KAHA Ligation' followed by Professor Jonathan Clayden, University of Manchester who spoke about '*Conformational Communication*'. The symposium's final speaker, Professor Wilfred van der Donk, University of Illinois, talked about '*Posttranslational modifications in natural product biosynthesis*'. A poster competition also took place, with a total of 56 posters from postgraduate students from all three institutions, judged by a panel of three judges: Professor Eoin Scanlan (TCD), Dr Andrew Phillips (UCD) and Dr James Barlow (RCSI).

Sponsors for the event included Eli Lilly, Waters, L'Institut de Recherches Servier, and GlaxoSmithKline, CEM Microwave Technology Ltd, Roche Ireland, Tokyo Chemical Industry, Bristol Myers Squibb, RSC and Hovione.

## "Best of the best" Springer Thesis prize for UCD Chemistry graduate

The Springer Thesis prize, awarded annually to graduates of internationally top-ranked research institutes, is chosen based on scientific excellence and impact on research. Each year universities and research institutes select their best thesis, nominated and endorsed by two recognised specialists, for consideration.

Recent PhD graduate from the UCD School of Chemistry & Chemical Biology, Dr Peter Byrne, who studied under Professor Declan Gilheany won the award of the Springer Prize in Chemistry for his thesis, uncovering new insight into one of the fundamental aspects of chemistry, the Wittig reaction. As part of the Springer Prize publishing award, a book with Dr Byrne's findings will be published shortly. These publications are designed to provide an accredited documentation of the valuable contributions made by today's younger generation of scientists.

## ■ First US-European Study Abroad Conference hosted by UCD

The US Forum on Education Abroad held their first European Conference in O'Reilly Hall in UCD in December, bringing together study abroad professionals from the United States and Europe. Titled *'Reinventing the European Experience: Culture, Politics and Diversity in U.S. Education Abroad'*, this was the first time the Forum had hosted a conference outside the US. Launched by President Michael D. Higgins and UCD President, Dr Hugh Brady it saw over 350 representatives from US institutions in attendance while a number of UCD staff also gave presentations as part of the conference.

Commenting on the significance of holding the conference in Ireland, Dr Brian Whelan, President of The Forum of Education Abroad, said: "Ireland as we know has been a crossroads for international education for centuries, it's a very popular destination for US students looking to study abroad. They've enrolled in your universities across Ireland and in the education abroad programmes here and had very positive experiences. So we felt with the support of all the Irish universities that it would be a natural fit to hold our first European conference here in Ireland."

Ms Enda Carroll, Manager for UCD Centre for Study Abroad added "UCD partners with over 75 US Universities who send students to study abroad for a semester in a range of academic areas across the university. UCD is currently welcoming its largest cohort of US study abroad students to date for Spring 2013."



President of Ireland, Michael D. Higgins, pictured speaking at the opening of the Forum on Education Abroad conference, hosted by UCD in December.



Polish teacher-delegates who took part in the workshop section of the UCD-Embassy of Poland conference held in Belfield in November.

## ■ UCD plugs the languages gap

Ireland's first conference supporting multilingual learners and literacy took place at UCD in late November. Co-organised by UCD and the Embassy of the Republic of Poland in Dublin, the conference was supported by a seed funding award from UCD Research to graduate researcher and Polish diaspora specialist Niamh Nestor (UCD Humanities Institute; School of Languages and Literatures). As the first academic institution in Ireland to provide such a level of support for migrant education and integration, this conference is a demonstration of UCD's leadership in this area and its on-going investment in education.

The conference was opened by UCD Deputy Registrar, Professor Bairbre Redmond and HE Marcin Nawrot, Ambassador of the Republic of Poland to Ireland.

Among the approximately 100 delegates were representatives (both teachers and parents) from across the spectrum of minority community schools: Polish, Estonian, Bosnian, Latvian and the Muslim schools, as well as the

principals of the various Irish schools which already teach non-curricular languages, e.g., Polish and Japanese. Representatives from the Department of Education and Skills and other key stakeholders also attended. An important discussion point was proposed Junior Certificate reform and the introduction of languages, such as Polish, at Junior Certificate level.

## ■ Exploring the Intriguing World at the Tip of a Crack

Most of us associate fracture with the damage of a cherished item or the pain and inconvenience of a broken bone. Yet for a group of researchers in the School of Mechanical and Materials Engineering, led by Professor Alojz Ivankovic and Dr Neal Murphy, the fracture characterisations of a wide range of materials provides great insight into how materials fail and more importantly, how their performance can be improved in the future.

The research is interdisciplinary in nature and relies on a combination of theoretical fracture mechanics, computational modeling and materials science at a range of length scales from the nano-scale upwards. The researchers have developed customised software which allows the governing laws of physics to be solved for complex problems involving the propagation and interaction of millions of micro-cracks. The general nature of the software allows the fracture behaviour of a wide range of materials to be investigated, including carbon or glass fibre; reinforced composite materials that are now extensively used in a wide range of applications from aircraft to wind turbine blades. The assembly of composite-to-composite and composite-to-metal components using fracture characterization of adhesive joints is vital to the structural integrity of the assembly. In recognition of its importance, the UCD Centre of Adhesion and Adhesives has been recently established, which is unique in the island of Ireland and is engaged in a wide range of research activities in conjunction with the world's largest adhesives manufacturer and a host of national and multi-national companies. The UCD researchers are actively involved in the drafting of international standards for the fracture testing of adhesive joints.

## Strong start to 2013 for UCD Athletics

2013 has gotten off to a strong start for UCD Athletics. At the recent IUA Indoor Track and Field Championships in Athlone, 13 medals were won by UCD students and two national records and three UCD club records were broken.

These included the performance of the day by PhD student Dave Tierney who set a new national record in the 16KG WFD (weight for distance) event and won the shot putt while setting a new UCD club record and personal best. UCD medicine undergraduate student Diarmuid Hickey was second in the shot putt while freshman student Thomas Bouchier had a great first outing with a third place in the 16KG WFD event.

Fiona Dennehy came second in the women's 1500m walk, while masters' student

Sarah Doyle piped fellow UCD student Aisling Watters to third in the 60m hurdles.

UCD Ad Astra Elite Athlete scholar Ciara Everard jumped back into the European Indoors selection race with a new Irish university record and a personal best in the 800m. A week later on February 10th, Everard made a real breakthrough to major senior international athletics. In just one race she broke a 23 year old Irish record, massively improved her personal best by two seconds and qualified for the European Athletics Indoor Championships in Gothenburg, Sweden.



UCD Soccer's Colin Jones and Marcus Byrne, joint top scorers in The Harding Cup 2013

## UCD Harding Cup Champions 2013

**UCD Soccer won the Harding Cup on February 10th, beating Trinity College 3-0 in the final. The match was a classic cup final affair, held at the University of Ulster, Coleraine. UCD had beaten the University of Limerick 5-1 and a very strong NUI Galway side 1-0 to get into the final. Victory means that UCD have won an impressive 8 out of the last 13 in the Harding Cup competition since the turn of the century.**

Speaking after the game captain Declan Keaney was elated: "We're all delighted with the win. We have a great bunch of players in the

squad who are all willing to work till the very end to get the win. We were carrying a few knocks coming into the game but I think playing through it shows the character that our players have."

Team manager Tony Sheridan was also happy with the outcome: "The lads worked really hard this weekend with three games in three days and I want to congratulate them on the win, things were tight in the final but our football shone through in the end and this sets the college up nicely for the Collingwood Cup in a couple of weeks. I would like to thank assistant manager Conor McCathy, Diarmuid McNally and all of the players for a great weekend's work."



UCD Agriculture student Martin Mulkerrins (centre) pictured on the occasion of winning four awards at the Connacht GAA provincial awards, with his parents Brian and Imelda Mulkerrins and with Moycullen Handball Club secretary, Tony Audley and his wife, Nora Audley.

## UCD's Martin Mulkerrins honoured by Connacht GAA

**At the Connacht GAA Provincial awards presented at the Connacht GAA Banquet in Castlebar recently, UCD Agriculture student Martin Mulkerrins was in receipt of a number of awards due to his achievements throughout 2012.**

Martin won the All-Ireland Intermediate handball singles title last year making him the only player in Galway and also the youngest player in the country to do so. Martin also travelled to Springfield, Missouri to win the United States Collegiate Handball Men's Open, becoming the first Irish champion in over seven years. He then teamed up with Niall O'Connor to claim the U19's Double title at the World Handball Championships held in City West. Most recently Mulkerrins claimed the Irish Collegiate Handball Association 40x20 singles intervarsity title; the first time a UCD player has won this tournament since 1992.

At the Awards banquet, Mulkerrins was presented with Young Male Handballer of the Year, Connacht GAA Writers Personality of the Month for October and subsequently winning the Connacht GAA Writers Personality of the Year and finally recipient of the Michael McDonnell Memorial award.



UCD Ad Astra Academy Scholars 2012/13 pictured at the UCD Ad Astra Awards ceremony in January, with Academy Director, UCD Registrar Prof. Mark Rogers and strand directors Prof. Liam Kennedy, Prof. Colin Boreham and Mr. Tony Carey.

## Ad Astra Awards

**Eighty five new scholars were welcomed into the UCD Ad Astra Academy at an awards ceremony and dinner in O'Reilly Hall in January. Fifty academic scholars, twenty five elite athletes and ten performing arts scholars were formally presented with their scholarships by Academy Director and UCD Registrar Professor Mark Rogers, in front of an audience of proud parents, secondary school principals and UCD staff.**

The UCD Ad Astra Academy, which is supported by donations to the UCD Foundation, is an initiative which recognises and nurtures exceptional students in academia, sports and the performing arts by offering unique supports and opportunities. This year's intake brings the overall Academy membership to 150.

In his opening comments Professor Rogers spoke of the calibre and diversity of student talent at UCD and acknowledged the contribution of parents and teachers in the achievements of the scholars. The scholars were presented with Ad Astra Academy scrolls, while the school principals received a

commemorative photo portrait of their former pupil.

Among the elite athletes awarded Ad Astra scholarships in 2012/13 were Olympian Annalise Murphy and Leinster and Ireland rugby player Seán O'Brien.

Guests were treated to an after dinner performance by the UCD Ad Astra Performing Arts scholars. The performance, inspired by Yeats' unique version of total theatre, combined drama, poetry, music and dance, and was directed by Ad Astra Director in Residence, Kellie Hughes.



Beijing-Dublin International College (BDIC) BE 'Internet of Things Engineering' students exchanging Chinese New Year presents with students from UCD BComm International, Stage 1 Chinese language class.

## Beijing Dublin International College students visits Dublin

**When they enrolled in October 2012 as UCD students in the first dual-degree programme being offered through the BJUT-UCD joint venture (BE Internet of Things Engineering) the class of 24 BDIC students had probably not expected that they would visit the Dublin campus in their first year. However, thanks to an initiative from the two University Presidents, the class arrived in Dublin immediately before the start of the UCD second semester and engaged in a range of educational, cultural and social activities.**

These included attending lectures in robotics, archaeology and computer science and visiting key historical and cultural sites, including Newgrange, as a part of an Irish Culture module to be delivered in Beijing in the second semester.

In addition, the class met with fellow students in Electronic Engineering and took part in Stage 1 Chinese language classes offered by the UCD Quinn School 'BComm International (Chinese)' degree programme.

Despite the poor weather, the overriding impression of their 'home' campus was one of friendship, learning and hospitality. Grappling with unfamiliar food, currency and a wide range of regional accents added to the challenge and satisfaction that was gained from their brief time in Dublin. At the end of the visit, the primary desire was to return and enjoy the UCD experience more directly and over a significantly longer period of time. We look forward to welcoming them back again in the future.

## UCD students win UK and Ireland sustainable business competition

**A team of UCD students has won the top prize at the final of the annual Unilever UK & Ireland Business Challenge, which took place in Surrey recently.**

Team Eco-App – made up Catherine Murnane (4th year BCL with politics), Fiona Kenny (MSc in HR management) and James Loughran (MSc in computer science) – will now go forward to compete against 10 teams from other Unilever markets around the globe at the final of the sustainable business competition in Singapore from 25 to 27 March.

The Unilever Business Challenge is open to UK and Ireland university students. Entrants were asked to submit either a two-minute video or a 200-word answer in response to the question "Using the Radox brand or any Unilever brand, how would you encourage sustainable habits in people?" Team Eco-App's winning concept encourages users to create a sustainable habit in 30 days. Users of the app are assigned a 30-day challenge and encouraged to log their progress on the app. Users of the app are incentivised by Unilever related prizes. According to the judges, Team Eco-App's idea was selected on the basis that it was transferrable to all of Unilever's brands and had the potential to change the traditional habits of a digital age consumer.



Pictured at a medal presentation during the December conferrings were Dr Gary O'Reilly Director of the D Psych Sc clinical psychology programme, Prof. Brian Nolan Principal of the UCD College of Human Sciences, Dr Aoife Menton, recipient of the Therèse Brady Medal, Dr Fionnuala Larkin, recipient of a distinction in the D Psych Sc, and Prof. Alan Carr, Head, UCD School of Psychology.