

UCD

today

FEATURE

UCD Students Dive in:

The student perspective on the new sport and student facilities

13. Shining new light on equine innovation

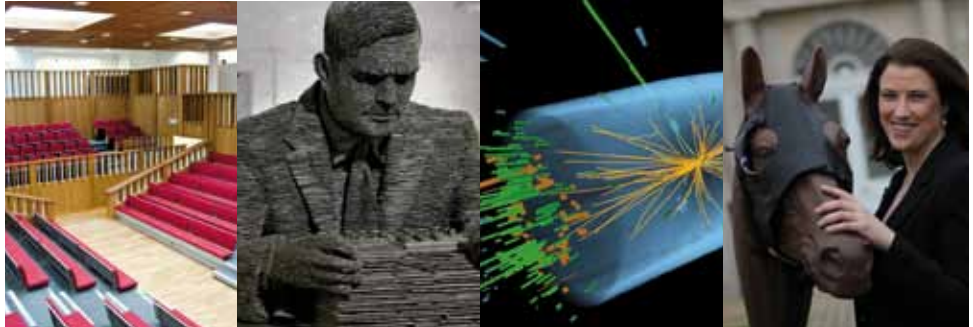
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The stats behind the maths



EILÍS O'BRIEN
Director of
Communication

The general increase in points this year led to widespread debate among parents and teachers about the impact of bonus points for Higher Maths in the Leaving Cert. In 2011, 8,237 students sat Higher Level Maths. This year that number leapt by 35% to 11,131. But how much impact did this have on actual points and places offered?

According to CAO, the final number of applicants presenting Higher Level Leaving Certificate Mathematics HD3 or better for university entry purposes this year was 12,914. This included applicants presenting results from previous years.

Of these, 3,353 had a points score that, as a result of the bonus, brought them above the points cutoff for an offer of a place on a level 8 course. Or in layman's terms, 3,353 students actually benefitted from the bonus points.

The Government objective - for 25% of Leaving Cert students to take Higher Maths - is certainly on track. Last year 16% of students sat Higher Maths. In 2012 the number rose to 22% and only 2.3% failed by comparison with 3.1% last year.

However, the link between bonus points and entry to degree programmes requiring Higher Maths is not so straight forward. Here at UCD, the strength of interest in computer science and science, which grew in first preferences by 23% and 27% over 2011, was such that points inevitably climbed (by 60 and 45 respectively) - well above the 25 bonus points.

The good news is that each of the degrees requiring Higher Maths also experienced significant increases in first preferences over 2011 - Engineering (8%), Structural Engineering and Architecture (12.5%), Actuarial & Financial Studies (35%), and Economics & Finance (69%) with consequent points rising by 30, 15, 30 and 60.

So, while it's a bit early to assume a trend towards higher knowledge of mathematics, the signs are encouraging.

When bonus points were first suggested it was with the understanding that, in addition to the rollout of Project Maths, the issue of maths teaching at second level would be tackled so that students would not be disadvantaged.

And when the dust settles, it's worth remembering that of the 56,600 students sitting the Leaving Certificate almost 33,000 students (60%) take Higher Level English.

UCD thanks...

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This publication is also available online at www.ucd.ie/ucdtoday

Cover image: The 50m Olympic-sized swimming pool in the new 'Áras na Macléinn' in Belfield.





(l-r) UCD Chaplain John McNerney; Cardinal Marc Ouellet, Papal Legate; Dr Pádraic Conway, Director of the UCD International Centre for Newman Studies and UCD Vice-President for University Relations

■ Pope's representative, Cardinal Marc Ouellet visits UCD as Dublin hosts 50th International Eucharistic congress

Cardinal Marc Ouellet, Prefect of the Congregation for Bishops, who represented the pope as Papal Legate at the 50th International Eucharistic Congress in Dublin, visited University College Dublin on 11 June 2012.

The Cardinal was accompanied by a group of Québécois pilgrims and others which included the Archbishop of Quebec, Gérald Lacroix, and Mgr Ciarán O'Carroll, Rector of the

Irish College in Rome and former pastor of University Church, St Stephen's Green.

Dr Pádraic Conway, Director of the UCD International Centre for Newman Studies and UCD Vice-President for University Relations, greeted Cardinal Ouellet on arrival and presented him with a copy of the UCD edition of Newman's *The Idea of a University* as a souvenir of his visit.

After concelebrating Mass with, *inter alia*, UCD chaplains John McNerney, John Callinan S.J. and León Ó Giolláin S.J., the Cardinal

departed for the RDS where most of the 50th International Eucharistic Congress was conducted.

Dr Conway co-chaired with Trinity College Senior Lecturer, Dr Patrick Geoghegan, a session at the Congress entitled "Taking Shorthand in Latin at the Second Vatican Council", a personal reflection on Vatican II on its 50th anniversary by Bishop Michael Smith of Meath.



The Science Cinema Tour, part of the UCD Imagine Science Film Festival, visits Marlay Park, Dublin

■ Science on the Silver Screen

Part of Dublin City of Science 2012 and running concurrently with ESOF, the UCD Imagine Science Film festival took place between July 5th and 14th, with a programme of events, discussions and screenings designed to encourage the public to explore science from a new perspective. At the heart of the festival was the 'Science Cinema Tour', in partnership with Google. A specially curated mobile screening unit travelled to Marlay Park, Tallaght, Finglas, Ballymun and Georges Dock in the IFSC to present an eclectic programme of innovative science shorts which communicated science in a fresh and vital way. At select screenings, Science Education and Outreach professionals from UCD ran live 'Science Exposure Sessions' with entertaining science and technology experiments. In addition to screenings in the Lighthouse Cinema, the Sugar Club and Meeting House Square, the

festival included a science film competition. Led by UCD Research and The National Film School, Dun Laoghaire Institute of Art, Design & Technology and supported by Science Foundation Ireland, the aim of the Science Expression competition was to link scientists and student filmmakers together to create new Irish science films. "Scientists have important things to say and film makers can help convey their stories," said Professor Des Fitzgerald, Vice-President for Research at University College Dublin and a member of the judging panel. The winning film, *Invisible*, received an AAAS Visual Science Award. Two of the team who produced the film will travel to New York for the Imagine Science Film Festival in November 2012 at which the winning film and the runner-up (with an Honourable Mention), *A Rogue Idea*, will be screened in competition.

■ ASA honours 50 and 70 year milestones

Founded in 1942, the Agricultural Science Association (ASA) celebrated its 70th anniversary this year. To mark the occasion, the ASA organised a special event in UCD on June 14th. Chaired by ASA President and UCD School of Agriculture and Food Science staff member Dr Karina Pierce, the event featured addresses by UCD President Dr Hugh Brady and former Dean of Agriculture, Dr Joseph Mannion. Marking another key milestone, a presentation was made to 94 year old Dr Harry Spain who served as ASA President in 1961-62, some 50 years ago. Dr Spain was a prominent figure in Irish agriculture from 1948 until his retirement as deputy secretary of the Department of Agriculture in 1978.

Two prominent ASA members also made presentations which looked to the future. Mr Owen Killian, Chief Executive of Aryzta AG plc, provided his views on trends and prospects in global food demand. Matt Dempsey, editor of the Irish Farmers Journal, highlighted the contribution of agricultural science graduates to the agri-food sector and the economy over the past seven decades, as well as examining their role in a challenging and exciting future for the sector.

■ Building contract signed as work starts on the new Sutherland School of Law

The contract for the new UCD Sutherland School of Law Building was recently signed by the UCD President, Dr Hugh Brady, and Mr. Theo Cullinane, CEO BAM Contractors, at a ceremony at Belfield. Present were the Honourable Peter Sutherland KCMG, SC, the principal donor for the project, and Mr Ruairi Quinn, TD, Minister for Education and Skills, as well as Professor Colin Scott, Dean UCD School of Law, Mr Declan McCourt, Chairman of the UCD School of Law Development Council, and Professor Imelda Maher, Academic Director of the law school building project. Also present were representatives of the major law firms contributing to the project and other invited guests from the legal profession and the wider community.



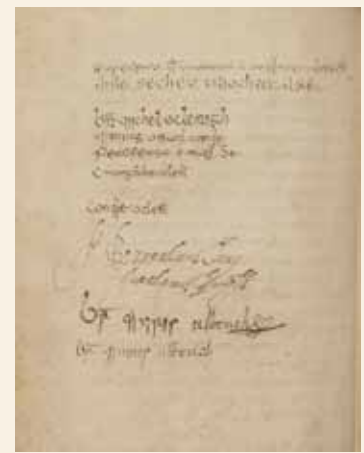
UCD President Dr Hugh Brady signs the contract with Theo Cullinane, CEO BAM Contractors (l) and Professor Imelda Maher, Academic Director of the law school building project with, in the back row (l-r) Prof Colin Scott, Dean UCD School of Law, Mr Ruairi Quinn, TD, Minister for Education and Skills, Hon Peter Sutherland KCMG, SC, and Mr Declan McCourt, Chairman UCD School of Law Development Council.

Professor Scott said that, within the broader framework of law as a transformational subject, the new building would enable the School to transform its teaching, learning and research and, in particular, to offer students and scholars new opportunities for bringing theory and practice together. Peter Sutherland was thanked for his foresight in making the lead gift for the law school building project. Professor Scott also thanked the law firms who had financially supported the project; A&L Goodbody, Arthur Cox, Mason, Hayes & Curran, William Fry, and Matheson Ormsby Prentice. He praised Mr Declan McCourt and the other members of the Development Council for their constant advice and assistance and the former Dean, Professor Paul O'Connor, whose vision and commitment was vital in laying the ground-work for the project and seeing it through its initial stages.

The Minister for Education and Skills, Mr Ruairi Quinn TD, congratulated all those involved in the project on the progress which had already been made. He particularly thanked Peter Sutherland for offering such a striking example of personal philanthropy. Responding, Peter Sutherland gave a wide-ranging address in which he recalled the influence which his time as a student in UCD had on his career and the rest of his life. He expressed his passionate commitment to education and stressed the importance which government policy ought to give to it. UCD President, Dr Brady, hailed the new building, located in the heart of the campus, as symbolic of the central role of the law school in the university.



From elsewhere in the collection - Ms B1, an Italian miniature of St. Francis receiving the stigmata



UCD-OFM Ms A13 - the signature page of the Annals, dated 1636. Ó Cléirigh's name is first of the Four Masters.

■ Hidden Treasures: The Annals of the Four Masters – UCD-OFM Ms A13

In 1632 Mícheál Ó Cléirigh, a Franciscan brother, along with three others, began work on the first set of annals to cover the whole of the island of Ireland from the beginning of time up to 1616. They were finished in four years. When they were finished they produced two sets of their annals. One volume remained in Franciscan hands – moving from Donegal to Louvain to Rome to Dublin – until it was placed in UCD Archives in 2000.

This is a miraculous volume written in an exquisite hand on high quality paper. Since it has come to UCD it has been conserved and re-united with its original binding. Vitally, along with its sister copies, it has been digitized. In 2007 all surviving copies were reunited for the first time in 370 years for an exhibition to mark the 400th anniversary of the foundation of the Irish Franciscan college of St. Anthony's Louvain.

Why is this single volume – UCD-OFM Ms A13 – such a great treasure in UCD's keeping? The *Annals of the Four Masters*, or *Annála Ríoghachta Éireann* is made up of 400,000 words deployed in a dazzlingly long chronological arc dense with personal and

place names. St. Anthony's, where the annals were first conceived, dedicated itself to making a case for Ireland as an ancient European nation. In doing so, the friars and their associates, engaged with Irish (Europe's oldest written vernacular) and with medieval learning in such a way that the very substance of the Gaelic world was itself recast in a European idiom. Their obsessions with bloodlines, with chronology, language and faith, were the obsessions of all Europe. This was a continent humming with the energies unleashed by printing, urbanization and new economic structures but also bleeding from plague, sectarian bloodshed and a crisis of authority.

A13 is not alone in UCD archives as it sits with hundreds of thousands of documents dating from the 11th to the 20th centuries that make up the Franciscan collection. Altogether this is an alternative national archive, another version of the story of Ireland. Even now, thanks to the generosity of the Mellon Foundation, scholars from all over the world are taking stock of this vast hoard. It is an embarrassment of intellectual riches at whose centre glitters a volume approaching its 400th birthday, a volume that has not yet finished speaking to the world.

For further information on the annals, see www.writingirishhistory.eu.

For high quality images from the text and from its sister volumes, see www.isos.dias.ie

For more information on the UCD Franciscan partnership, see www.ucd.ie/mocleirigh

■ Doctor of Literature awarded to Professor Maeve Conrick



Professor Maeve Conrick, Principal of the UCD College of Arts and Celtic Studies, has been awarded the degree of Doctor of Literature (DLitt) on the basis of published work by the National University of Ireland

(NUI). Degrees on published work awarded by the NUI are higher doctorates and are the highest qualifications awarded by the University. They are awarded to scholars who have, over a sustained period, published a substantial body of ground-breaking and influential work in a field of specialisation and who have achieved outstanding distinction internationally in that field.

Professor Conrick's published work covers a range of areas in Linguistics, Sociolinguistics and Applied Linguistics, focusing particularly on the linguistics of Canada, language policy and language planning (in Canada, Québec, Ireland and Europe) and language and gender issues in French and English. Among the major themes she has addressed in her published work (books, journal articles, book chapters) are: the feminisation of professional titles in Canadian French; official bilingualism/linguistic duality; language policy in Québec; terminology and linguistic creativity; comparative perspectives on Canada and Ireland; linguistic representation of gender.

The degree of DLitt was conferred on Professor Conrick at a conferring ceremony at UCD in September 2012.

“I can’t believe it’s in UCD.” That’s how Rachel Breslin, UCD Students’ Union President, responded when asked what she thought of the new UCD Sport and Leisure facility which will be officially opened in October. “It’s like getting a new car, you feel that it’s not really yours and someone is going to come back later and take it away again – it’s that gorgeous”.

To say that Rachel is excited and delighted with the new building, officially called Áras na Mac léinn, would be to undersell both words; when she thinks aloud how the Áras is going to change Belfield her mantra is that the possibilities are endless. Some say the original Belfield buildings kept the student body somewhat split up; with students having a lecture here, a society meeting there, food in one building, a pint in another, sports in yet another.

“But that’s all changed, changed utterly,” says Business and Law undergraduate Breslin. “I can see the incoming cohort of students having a wholly different Belfield experience to any of the generations before them, directly due to the Áras. As the aim is to make it a 24hr centre, in an extreme case it’s possible that a student could come in at 7am to do some early morning study, go for a swim, have a healthy breakfast, head for lectures, come back to the Áras for a lunchtime movie, watch a Students Union Council meeting (joke!), work out in the gym, do some reading in the ‘quiet area’ and then cap off the evening with their buddies in the new student bar. Where else would you want to go? The Áras is now Belfield Central.”

She adds, “Anecdotally I’ve already heard of new students choosing UCD having seen the new facilities, which are easily the best in the country. They can imagine the possibilities here now. It’s like your holidays. You don’t imagine the hassle of airports and buses but you do see yourself sitting on a sunny beach. Well I don’t know anyone coming to college imagining the ‘thrill’ of attending a lecture with 500 others in Theatre L. But you can imagine yourself doing so many new things in the Áras. It’s like a social sweet shop and you want to try a little of everything. You like theatre? – Yes, there’s the university’s first dedicated ‘proper’ theatre. You



The new Olympic-sized pool

UCD students now free to head for the Áras



The new debating chamber

like movies? – Yes, you have your own ‘private’ cinema. You like keeping healthy? – Yes, you have your own Olympic sized pool and a massive gym. You like media? – Yes, there’s a dedicated newspaper office and your own radio station. You want to be involved with last year’s winning society, the Dance Society? – Yes, there’s a new dance studio...and, and, and.”

“What person involved in any aspect of student life will not use this building?”

“Finally societies have dedicated meeting rooms that can only help them grow and flourish. Then, for the debating societies, there’s what I think is the jewel in the crown, the FitzGerald Chamber, the first dedicated debating chamber in the country – a beautiful, beautiful space. What person involved in any aspect of student life will not use this building?”

Breslin believes that the Áras will have a direct, positive effect on student health. “Cost is always a deterrent for students but with the gym being free I know already of people starting to use the facility who were previously put off getting healthy due to finances. If the building did nothing more than that, then it would be a massive plus. But fortunately there is so much more. For example, there’s a play about mental health already at planning stage, due to open during Mental Health Week, aiming to highlight this big issue in a different way to our students. In fact mental health is now so important that the Students’ Union is planning some radical ideas to use the Áras to help integrate new students and break down isolation and loneliness. We’re going to host food and film nights where you are only allowed in if you *don’t* come with your mates – you have to fly solo – but the reward is

that you’ll leave with new college mates. I’m expecting a big turnout now that we have a proper cinema to attract naturally reluctant students.”

“Other ‘getting to know you’ initiatives involve fun relay races in the pool – never a possibility before. The UCD Volunteers Overseas/Cumann Gaelach have plans to expand their annual spring Rás UCD to incorporate the Áras as well, all aimed at getting more and more student interaction, to break down barriers and drive loneliness off the country’s largest campus.”

“Here’s another thought. The Áras is a student centre but I’m delighted by the drive to get staff to use it as well. And here’s a challenge. I’m now asking the academic staff to make the new bar their bar as well. Part of the UCD education should be lively discussions with your lecturers about the Big Issues, over a pint. Isn’t it time for closer integration between ‘them and us’, lecturers and students, to become one UCD?”

“Finally, I’d like to acknowledge how grateful we are for the foresight of UCD students back in 2006 who proposed and voted in favour of charging a levy on every student for this project, even though they knew at the time that only the tiniest minority would be still in UCD to enjoy its benefits. I really do think it was a very selfless thing to do and we have a responsibility to see their vision for the Student Centre realised now that its doors are open. And in answer to those who’ve asked if I’m at all concerned about the Áras being ‘too good’ for students: I’m not. Students stick up for each other and mind each other. This is the students’ own building. They’ll ‘stick up’ for their building as well and it’ll be minded for future students, like we were kind of ‘minded’ by the students back in 2006. We’ll mind it – no doubt about it.”

Rachel Breslin was in conversation with Conall O Morain (BA 1979), columnist and radio presenter.

Predicting toxicity in the drug development pipeline

It is not currently possible to predict accurately and at an early stage whether there are toxicity issues with candidate drugs. This shortcoming of existing toxicology evaluation methods can not only create a bottleneck in the drug development pipeline but can sometimes lead to the withdrawal of drugs from the market.

UCD researchers have reported in *Molecular & Cellular Proteomics* on a proof-of-principle study that may benefit the pharmaceutical industry in the future by providing a roadmap for large scale pre-clinical toxicology biomarker verification studies.

The study involved the molecular profiling of models that had been exposed to known toxic insults in an effort to derive the associated biomarker signatures.

Dr Ben Collins, first author and Agilent UCD Newman Fellow, explains, "The idea was to use transcriptomics, and proteomics and to combine the data to provide earlier markers toxicity. Although this study focused on one hepatotoxic compound, there is sufficient

flexibility in the approach used to allow medium to high throughput for large scale verification studies involving large numbers of well-defined toxicants and ultimately for more sensitive toxicology evaluation for drugs under early development".

Team leader and corresponding author, Professor Steve Pennington adds, "We are now working to extend this approach to more readily accessible sample types, such as blood, and are applying it in other studies for diagnostics for chronic conditions, such as cancer, cardiovascular disease, and arthritis. With support from Agilent we are now establishing a dedicated lab to undertake these SRM-based validation studies".

June – A Month of Philosophy Conferences

The UCD School of Philosophy hosted three major international conferences in June 2012. Chief among them was the Wilfrid Sellars Centenary Conference (June 4-8), celebrating the work of one of the most important philosophers of this century. Among the speakers were some of the best-known names in philosophy today including Professor Robert Brandom (Pittsburgh), Professor Paul Churchland (UC San Diego), Professor John McDowell (Pittsburgh), Professor Ruth Millikan (Connecticut), Professor Huw Price (Cambridge), and Professor David Rosenthal (CUNY). The conference was funded by the Andrew Mellon's Distinguished Achievement Award to John McDowell and was organised by Dr James O'Shea. Continuing on the theme of American philosophy, immediately after the Sellars event the School of Philosophy hosted an IRC funded conference on the American Style in Philosophy where speakers from USA, UK, Spain and Ireland explored the question of whether there is a distinctive voice in American philosophy. The month of intensive philosophising concluded with a conference to launch a new MA on Consciousness and Embodiment. Philosophers from USA, UK and Ireland discussed the topic of Group Think and the boundaries of the human mind.

DRHEA Teaching Fellowship awarded

Dr Tara Cusack, UCD School of Public Health, Physiotherapy and Population Science, was recently awarded a Dublin Region Higher Education Alliance (DRHEA) Teaching Fellowship. Dr Cusack will be working with four other colleagues from across the DRHEA on a cross-institution project to enhance the first year learning experience. This project will be of relevance to all higher education institutions within the DRHEA partnership. Work has

already commenced on scoping the group Fellowship project, whose working title is: 'What is the best First Year experience? - from the student and lecturing staff perspective - Social, Academic and Practical'. Over the coming months the teaching fellows will visit institutions to discuss and explore current approaches with academic colleagues and to disseminate the emergent issues from their work.

Gradaim Bhord na Gaeilge 2012

D'fháiltaigh Uachtarán UCD, An Dr Aodh Ó Brádaigh agus Cathaoirleach Bhord na Gaeilge UCD, An tOllamh Micheál Ó Dochartaigh roimh an Taoiseach Éanna Ó Cionnaith chuig Gradaim Bhord na Gaeilge 2012.

The *Bord na Gaeilge Awards and Cumann Gaelach Gold Medal*, held in association with the Vice-President for Students, Dr Martin Butler, were founded in 2008 to recognise the outstanding achievements of students, staff and alumni in the promotion of the language.

This year's event commenced with an exhibition of projects completed by the 24 Residence Scheme Scholars who reside in *Teach na Gaeilge* on campus, as well as those completed by *An Cumann Gaelach* and the Students' Union. Civic engagement is a key feature of the residence scheme and the students' displays included the work undertaken in the horizons module 'Scileanna Cumarsáide', specially designed by Bord na Gaeilge UCD in association with *Gaelchultúr Teoranta* and accredited by the UCD School of Irish, Celtic Studies, Irish Folklore and Linguistics.

An Taoiseach Enda Kenny presented the awards, congratulated the 2012 recipients and praised the work of present and past students of *Teach na Gaeilge*, now in its twelfth year. Alumni award-winner Micheal Ó Muircheartaigh, a frequent guest at *Seachtain na Gaeilge UCD*, said he felt inspired by the enthusiasm and innovativeness of the Bord na Gaeilge scholars.



Students from UCD's Teach Na Gaeilge residence scheme, An Cumann Gaelach and the Students' Union discuss their exhibition of projects with An Taoiseach Enda Kenny at the Bord na Gaeilge awards event.

Bhronn Uachtarán UCD, An Dr Aodh Ó Brádaigh leabharán speisialta ar an dTaoiseach ina raibh ábhar bhéaloideas a bhailigh a athair, Anraoí Ó Cionnaith 1937-1938, le linn dó a bheith ina bhunmúinteoir i nDoire Bhó Riada, Sraith Salach Contae na Gaillimhe. Is faoi scéim *Bailiúchán Lámhscríbhinní na Scol* a bailíodh an t-ábhar atá ar fáil anois i gCnuasach Bhéaloideas Éireann san Ollscoil, www.ucd.ie/irishfolklore.

Ceiliúradh ar an éacht a rinne mic léinn agus baill foirne ar son na teanga a bhí san ócáid seo a dúirt Cathaoirleach an Bhoird, an tOllamh Micheál Ó Dochartaigh, agus ar inchur na mac léinn saol i saol ilchultúrtha an champais.

Buaiteoirí 2012/Winners included: *Ambasadóirí Teanga/Language Ambassadors*: Eoin Murphy & Hannah Ní Riain; *Gradam do Chumann na bliana /Society of the year*: Cumann Fisiteirpe/UCD Physiotherapy Society ; *Bonn Óir an Chumainn Ghaelaigh/Cumann Gaelach Gold Medal*: Iseult Ní Rinn; *Gradam Foirne/Staff Award*: Vera Orschell, Scoil na Gaeilge agus na Cartlannaíochta/UCD School of History and Archives; *Gradam Alumni/Alumni Award*: Micheál Ó Muircheartaigh



A statue of Alan Turing which now has pride of place in Bletchley Park. Photo cc Flickr user Duane Wessels

Turing's Legacy

“Can machines think?” One sentence into his famous 1950 paper on *Computing Machinery and Intelligence* British mathematician Alan Turing asked a question that led to the creation of the discipline of artificial intelligence, while his analogous descriptions of the mind as a computer were the formative basis of modern cognitive science.

During the EuroScience Open Forum (ESOF) held in Dublin and attended by over 3,000 delegates in May, the profound impact of Turing across multiple scientific disciplines was discussed by a panel chaired by Professor Mark Keane, UCD Chair of Computer Science, who was joined by Professor Dermot Moran, UCD School of Philosophy, as well as Professor Marcus de Sautoy of Oxford University and Dr. Freddy Lecue of IBM.

Their discussion, ‘Turing’s Legacy’, looked at Turing’s work not only in terms of modern artificial intelligence (A.I.) research but also at its far-reaching effects on many disciplines that, at first glance, are seemingly unrelated.



As a computer scientist and cognitive scientist Professor Mark Keane’s research spans two interconnected disciplines that owe their legacy to Turing. His work on the use of analogy in creativity and problem solving derives from Turing stating that the mind can be seen as a universal computing machine.

“This metaphor goes right through cognitive science. That idea of the mind as a universal computing machine is his legacy. It was not strongly stated until he outlined it and it wasn’t fully realised within the field of cognitive science until the 1970’s.”

“Think of abnormal psychology in the time of Freud where the water system model [thoughts as water, consciousness as iceberg] was used. When you look back on those older models and how hamstrung the discipline you realize it was because it didn’t have good overarching metaphor.”

Turing’s legacy also extends to economics: specifically, predicting stock market crashes. Keane’s research analysed over 17,000 online newspaper articles related to finance and spanning a four year period. A strong correlation

“Being able to trick others is, unfortunately, a crucial feature of intelligence.”

was found between the language used in these articles and the movement in the stock market. This research can be used to make predictions explains Keane.

Turing’s theory of computable functions, when applied to pieces of text, can infer patterns of behaviour over time: “You can computationally characterise the structure of language and from this you can find out a lot about the voice of the herd,” explains Keane.

Even biology has benefited from Turing. In fact, the biosciences are predicated on the idea that all biological processes are computational, says Keane. “If you look at the way that neurological or biochemical pathways are characterised or even gene analysis and gene alignment, you begin to realise that we are living in an information age where everything can be characterised as information.”

“This positing of the universal Turing machine underlies everything computable we have today.”

Despite his vast legacy Turing is known best for his test of machine intelligence whereby a computer capable of tricking someone into thinking that they are conversing with a human is proof of a thinking machine.

The Turing test has been referred to as a “blind alley” in modern AI research due to interpretations of its definition of machine intelligence but it has much more to offer in terms of philosophical implications says Professor Dermot Moran.

“He set a very interesting challenge [with the Turing test] but he also put his finger on something else without fully realising it,” Moran asserts.

“He thought that the mere simulation of intelligence was true intelligence. This leads us to dissimulation. Being able to trick others is, unfortunately, a crucial feature of intelligence.”

By studying chimps and watching them hiding things on each other we can see how crucial dissimulation is to primate intelligence says Moran: “Chimps have been observed opening a box to find a banana.

“When they are in the company of other chimps they close the box, leaving the banana there. When they get a chance they sneak back to the box and grab the banana when they think

no one else is looking. There is a certain amount of trickery built into nature.”

While Moran feels that the Turing test fails as an attempt to build a machine with consciousness he points out that it has been crucial to thinking about thinking, or metacognition.

“Dissimulation also allows us to have second order intentions. We can have a deep desire to smoke or drink alcohol while reflecting upon these drives and feeling that they are wrong. We have the ability to form a contrary attitude towards our own desires.”

Speaking about University College Dublin’s role in the Euroscience Open Forum (ESOF), Professor Desmond Fitzgerald, Vice President for Research, said: “UCD was involved throughout the programme, with contributions from science, engineering, innovation, humanities and the arts.

“The success of the Euroscience Open Forum made the public excited about science and appreciate how scientists transform their lives through their discoveries.”

By stating what he defined as a thinking machine, Turing also got us thinking about what can and cannot be reproduced artificially, says Moran.

“While we already have a method of reproducing intelligent beings the benefit of mimicking biological systems is evident in areas biomechanics, enabling the design of better artificial limbs.”

Professor Moran finishes by stating that a huge part of human intelligence that cannot be replicated by a machine is the ability to imagine: “Try modeling imagination”. One, however, cannot help but think that Turing’s greatest legacy is imagination: by taking a leap and envisioning the mind as a computational device we have learned more about what it means to be human than we ever could have in a world without Turing.

Professor Mark Keane and Professor Dermot Moran were in conversation with Marie Boran (BSc 2002) a freelance science and technology writer

“That idea of the mind as a universal computing machine is his legacy”

‘Message of Hope’ for Mental Health

Launching a study by UCD researchers, funded by the Health Research Board, the Minister for Disability, Equality, Mental Health and Older People, Ms Kathleen Lynch TD noted that “conventional treatments can be supplemented by social support from family, friends and the community in the battle against mental health problems in Ireland”. The study, *“Enabling Recovery: The Benefits of Supporting Socialisation, Report of a Randomised Control Trial”*: led by Dr Ann Sheridan, UCD School of Nursing, Midwifery, and Health Systems, involved over 100 adults, who were given additional supports to increase social activities over a nine month period, while they were already receiving conventional treatment for mental health problems.

The study findings showed that taking part in normal social activities outside of the constraints of the mental health system and the home environment helps people with mental health difficulties to feel less isolated, less stigmatised, and less anxious. “By the end of the study, all of the participants reported feeling better about themselves, having more confidence to socialise in their community, and experiencing fewer symptoms of depression,” said Dr Sheridan.

Health Research Board Chief Executive, Enda Connolly, said: “The outcome of this research is positive and it’s simple; socialising with others helps the recovery process for people with mental health problems. This provides a clear message of hope.”



(l-r) Professor Damien McLoughlin, UCD Smurfit School, Professor Tony Cunningham and Professor Ciarán ÓhÓgartaigh, Dean UCD School of Business at the event launching the AC Cunningham Chair.

UCD Smurfit School Announces AC Cunningham Chair of Marketing

One of the founding fathers of modern marketing in Ireland has been honoured through the creation of the A.C.

Cunningham Chair of Marketing and the Cunningham Scholar programme at the UCD Michael Smurfit Graduate Business School. Professor A.C. (Tony) Cunningham was the first Professor of Marketing in Ireland and was one of the architects of the UCD School of Business. He came to UCD in the early 1960s following a PhD at Cornell University in the United States, funded by a Kellogg scholarship.

In his professorial role in UCD, he educated many generations of marketing professionals who have been instrumental in developing the Irish economy. He was also an innovator, setting up several important new education programmes including the MBS in marketing (now the MSc), and the MSc in Marketing Practice. He also pioneered the idea of reaching out to the developing world and taught many programmes overseas.

Tony Cunningham’s legacy as a friend and mentor to many people both in business and in academia was acknowledged by the desire of many supporters to set up a Chair in marketing to honour his contribution in perpetuity; Professor Damien McLoughlin has now been appointed to the new A.C. Cunningham Chair of marketing. To further extend the legacy, a new scholarship programme, to be called the Cunningham Scholars, has been founded to fund doctoral and post-doctoral studies in marketing at UCD Smurfit School.



At the signing in China of the MOU between UCD and leading Chinese dairy producer Dairy United are (l-r) Julie Sinnamon, Executive Director, Enterprise Ireland; Professor Grace Mulcahy, Dean, UCD School of Veterinary Medicine, Simon Coveney TD, Minister for Agriculture, Food and the Marine; and Mr Lee Zhenghong, General Manager, Dairy United

UCD to share expertise with leading Chinese Dairy Producer

During an Irish food & agri-services mission to China in spring of this year, it was announced that UCD has signed a Memorandum of Understanding (MOU) with a leading Chinese dairy producer, Dairy United. The MOU which will result in multi-million euro contracts for products and services, envisages the development of a China-Ireland Agricultural demonstration farm in Hohhot, (Inner Mongolia) collaborative research projects, the provision of education and training services, and collaboration on the creation of a trade corridor to facilitate the introduction of Irish exporters to the Inner Mongolian region.

UCD will be collaborating with a number of Irish agricultural equipment and services companies to deliver an integrated package of education and training, research, services and technology to Dairy United.

Witnessing the signing of the MOU in Shanghai the Minister for Agriculture, Food and the Marine, Simon Coveney stated, “Food is the largest export sector for Irish industry. We have developed a very strong reputation for quality products. This excellence is recognised globally and provides a strong opportunity for the export of agriculture services & technology.”

Commenting on the origins of the deal the UCD Dean of Agriculture and Food Science Professor Alex Evans stated “This partnership came about because of Ireland’s global reputation in dairy production and the ability of UCD and Irish agri-service companies to offer a complete solution, incorporating education, training, agricultural products and services, that meet Dairy United requirements and will form the basis of a long term relationship.”

Clinton advisor speaks at UCD seminar on global trends in agriculture and food

The amount of food needed to feed a growing world population over the next 40 years will equal the amount produced over the last 10,000 years, a UCD seminar was told. Dr Jack Bobo, special adviser to US Secretary of State Hilary Clinton, said meeting the needs of the additional 75 million people a year,

equivalent to the population of Germany, and the one billion who currently go hungry every day, is a daunting challenge for farmers and the food industry globally. He said the use of biotechnology, including GM crops, will be very important in sustainably meeting this additional food demand.

The international market in grain and soya is now dominated by GM and the EU imports 12.5 billion of these products every year for livestock feeding. With 70 GM varieties currently awaiting EU approval and a further 120 approval applications expected by 2015, he said there is real potential for severe market disruption. “Things may have to get worse before they get better and this may force EU policy to better align with market realities,” he said. The seminar was also told that EU agriculture is way behind the mark in

international food production trends. Between 2010 and 2019, EU food production is projected to increase by 4%, compared to 40% in Brazil and 10-15% in the US.

Professor Jimmy Burke, Maastock Professor of Crop Science at the UCD School of Agriculture & Food Science told the seminar that GM technology has revolutionised the study of biology, including medicine and agriculture. It has led to great benefits for mankind, in medicine, food and agriculture, and in forensics. This new technology is an entirely logical and rational extension of plant breeding that was started by the first farmers. “Humans have always guided the evolution of crops” while “many of the crops we have today never existed [in their present form] at all and were the result of 10,000 years of selection and classical plant breeding”.

The hunt for the Higgs



Dr Ronan McNulty

On the morning of July 4th this year, the eyes of the world were on Geneva. There was going to be a big announcement from the research organisation CERN and the anticipation was high. Over previous months, CERN had been narrowing the search for a type of fundamental particle in physics called the Higgs particle. The quest to find this particle - a missing piece in the model of physics that describes matter in the universe - had been going on for decades. Had they discovered something? And if so, what would it mean?

The Higgs boson, which was proposed by British scientist Peter Higgs and others around 50 years ago, is one of 17 fundamental particles that everything in our universe can be decomposed into, explains Dr Ronan McNulty, a senior lecturer at UCD School of Physics and a visiting professor at the University of Liverpool.

“At that time, theoretical physics was at an impasse,” he says. “It could successfully describe all of electricity, magnetism and radioactivity, but only if the particles involved were massless. Higgs and others came up with an ingenious mechanism by which mass could be introduced into the theory.”

Developing the theory was one major advance, but what about finding evidence for it? A Higgs boson would be a relatively large sub-atomic particle, and the massive scale of energy needed to produce it existed about one billionth of a second after the Big Bang, more than 13.7 billion years ago. So to make a Higgs, you would effectively have to reproduce the Big Bang in an environment where you can watch what happens. Enter the Large Hadron Collider, an approximately 27km-long ring-shaped underground track where beams of protons can be smashed together at speed.

“The LHC fires two protons together at high energies and this energy turns into mass,” explains Dr McNulty. “Sometimes a Higgs boson is produced and this decays instantaneously into other particles which we can detect. By reconstructing the decay fragments, we can infer the presence of the Higgs.”

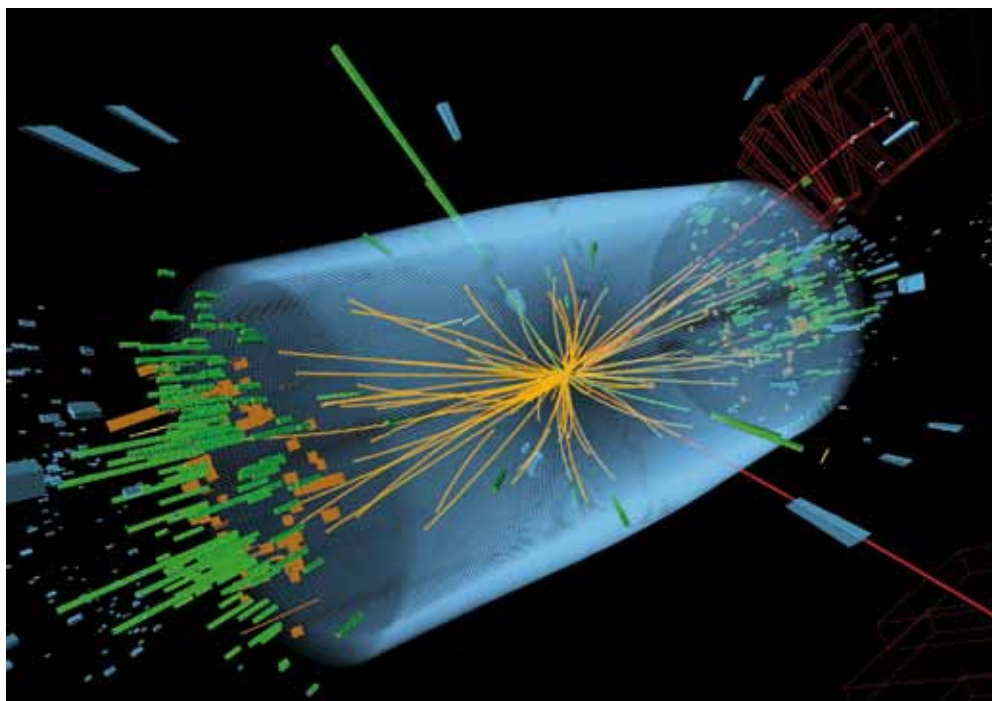
So what did CERN have to tell the world in July? People queued through the night to stake a place in the small auditorium where the announcement was scheduled for the next morning. Then, as the time came for the news, viewers from around the world were watched over the Internet.

What greeted them didn't disappoint: results from two experiments at the Large Hadron Collider - ATLAS and CMS - had each pinpointed a particle consistent with the predicted Higgs. Present at the conference was Peter Higgs himself, and he was moved to tears.

“This is probably the most important physics discovery for 80 years; the last time we had an event of such magnitude was the discovery of anti-matter,” says Dr McNulty. “It is the culmination of 50 years of experimental searching which has involved thousands of scientists throughout the world, including Ireland.”

Dr McNulty's group made an important contribution to the search for the Higgs through their work on the ‘LHCb’ experiment at CERN, one of the four experiments that operate on the LHC collider. The UCD group made a particular breakthrough by analysing W and Z bosons, which are heavy, like the Higgs.

“A careful investigation of the properties of the W and Z, such as we made in 2008, is a window onto the Higgs,” he explains. “Of even



Event recorded with the CMS detector in 2012 at a proton-proton centre of mass energy of 8 TeV. The event shows characteristics expected from the decay of the SM Higgs boson to a pair of Z bosons, one of which subsequently decays to a pair of electrons (green lines and green towers) and the other Z decays to a pair of muons (red lines). The event could also be due to known standard model background processes. © Image, courtesy of CERN

greater importance is that fact that when the Higgs boson decays, it often produces W and Z bosons. Therefore, being able to reconstruct W and Z bosons is a necessary first step to being able to reconstruct the Higgs.”

Higgs bosons are around 10,000 times rarer than W and Z bosons, but as the UCD researchers work through the information from the LHCb experiment, Dr McNulty is hopeful they will also see a hint of the presence of the Higgs there. “Seeing the Higgs in LHCb too is very important, because it gives us more information about the properties of the Higgs and how it behaves.”

“to make a Higgs, you would effectively have to reproduce the Big Bang”

He describes how the next few years are going to be “incredibly exciting” as researchers figure out the nature of the Higgs: “Many people expect that the Higgs will reveal much deeper truths about the nature of the universe - it may be the product of supersymmetry for example. To answer these questions we must gather as many Higgs bosons as possible and see how they behave.”

UCD will play its part through ongoing work on the LHCb experiment.

And more generally, Dr McNulty notes how the ‘hunt for the Higgs’ has captured the imagination of the public.

“I believe it sends an inspirational message that science is fascinating, fun, and makes the world a better place,” he says. “And beyond the noble aim of understanding the very nature of our universe, we reap the rewards of this curiosity in technology which gives us new medical detectors like PET scans and hadron [anti-cancer] therapy, more efficient electricity generation or a new social order [CERN played a role in the development of the worldwide web].” Indeed, in a case of spectacular timing, during the Euroscience Open Forum (ESOF2012) this summer the Royal Irish Academy hosted a ‘Higgs master class’ a mere 10 days after the CERN announcement. Dr McNulty was a driving force behind the event, which brought some of CERN's top scientists and engineers to Dawson Street to talk to a packed and diverse audience.

Dr McNulty has long been an advocate of Ireland joining CERN, and he hopes the recent announcement about the Higgs and new changes in membership subscriptions could help to make that a reality.

“CERN has recently introduced a partial membership scheme where you can pay a proportion of the full subscription and receive a portion of the benefits,” he says. “This greatly lowers the bar and means Ireland could be involved for about €1m a year.”

Dr Ronan McNulty was in conversation with freelance journalist Claire O'Connell (BSc 1992, PhD 1998).



Participants at the UCD School of Politics and International Relations conference on 'Elections, Public Opinion and Turnout' included (l-r): Prof John Coakley, James McBride, Stephen Quinlan, Prof Michael Gallagher (TCD), Prof Richard Sinnott, Prof Palle Svensson (Aarhus), Prof Bernadette Hayes (Aberdeen), Prof David Farrell, Dr Michael O'Kelly (Quintiles), Prof Lieven de Winter (Louvain), Prof Soren Thomsen (Aarhus), Prof Emeritus Jean Blondel (EUI), Dr Derek Hutcheson, Prof Anthony Heath (Oxford), Dr Johan Elkink, Dr Iseult Honohan

EU Stability Treaty referendum prompts debate and discussion of the referendum route in Ireland

Coinciding with the recent Treaty on Stability, Coordination and Governance in the Economic and Monetary Union (Fiscal Stability Treaty) referendum, the UCD School of Politics and International Relations hosted a two-day conference honouring the career of Professor Richard Sinnott, an internationally renowned scholar in the study of elections, referendums and turnout. Issues raised over the two days included: why the referendum route in Ireland; the role of governments in referendum campaigns; citizens' rights in the electoral process; electoral reform; how knowledgeable are voters and what determines people's votes in elections.

Participants included some of the leading scholars in the field from UCD, Ireland and overseas, among them: Professor Susan Banducci (Exeter), Professor Jean Blondel (EUI), Professor Lieven de Winter (Louvain), Professor Michael Gallagher (TCD), Professor Bernadette Hayes (Aberdeen), Professor Anthony Heath (Oxford), Professor Michael Marsh (TCD), Professor Palle Svensson (Aarhus), and Professor Soren Thomsen (Aarhus).

Professor Sinnott and Dr Johan Elkink also led a conference hosted by the European Parliament Information Office in Dublin on July 6th to further analyse Ireland's choices in the

Stability Treaty referendum. Professor Sinnott and Dr Elkink had, in consultation with the European Parliament and with market research firm TNS, designed a flash Eurobarometer survey, which was conducted a day after the Irish referendum of 31st May 2012. Two thousand Irish registered voters aged 18 or over were interviewed about their reasons for voting or not, their understanding of the treaty, as well as their main sources of information and knowledge about the EU. Further details on the findings of this survey can be found at www.europarl.ie/preview/en/news

Careergro on cloud nine after funding success

Careergro, a human resources start-up company headquartered at NovaUCD, has secured an investment of €300,000 from private investors and Enterprise Ireland.

Careergro has developed a cloud-based career development tool for employees and companies. The software tool enables employees to take the initiative and use career-coaching best practices to assess themselves, within a business context. The start-up intends to use the funding to support its business expansion activities and expects to hire an additional 15 people over the next 3 years. Careergro has also recently opened a new sales office in Hammersmith, London to support its expansion into the UK market.

Awakening curiosity about Chinese language and culture

Transition Year students in Ireland will soon have the opportunity to learn traditional and modern aspects of Chinese culture as well as some of the Chinese language, through a new Transition Unit in Chinese developed jointly by the National Council for Curriculum and Assessment and the UCD Confucius Institute for Ireland.

The Transition Unit was launched by the Minister for Education and Skills, Ruairi Quinn, T.D. at an event organised by the National Council for Curriculum and Assessment in Portlaoise in May, attended by representatives of

the Chinese embassy, and by Mr. Zengan Peng and Ms. Yan Liu of the Hanban Institute in China, the headquarters of Confucius Institutes worldwide, who had travelled from China to attend.

Minister Quinn paid tribute to the UCD Confucius Institute for Ireland and the Hanban Institute and Chinese government for their support in developing the material. He also thanked the Confucius Institute at UCC for its work with schools in Munster.

The Director of the UCD Confucius Institute for Ireland, Dr Wang Liming said: "I'm delighted to see such a great celebration of the Irish schools in showcasing the achievements made in Chinese language and culture studies and also proud that the Teaching Pack for Transition Unit developed by our Institute has been officially launched by the Minister and NCCA at such a significant event."

The unit is supported by online materials, a DVD and a teacher's handbook available through the National Council for Curriculum and Assessment www.ncca.ie and the UCD Confucius Institute for Ireland.

Launch of new Intellectual Property Protocol

At an event held at NovaUCD the Minister for Jobs, Enterprise and Innovation, Richard Bruton TD, together with the Minister for Research and Innovation, Sean Sherlock TD, announced new structures to make it easier to commercialise and ultimately create jobs from ideas developed through publicly-funded research.

The new structures, which aim to encourage more businesses to commercialise R&D by ensuring that they can access the results of State-funded research and development with

greater ease and certainty, include a new Central Technology Transfer Office, to act as a one-stop shop for businesses seeking to use intellectual property deriving from publicly-funded research. Standardised intellectual property terms, which will facilitate easy-to-set-up agreements between businesses and researchers are also included, as is improved management of Intellectual Property. Generous commercial terms to encourage businesses to engage with researchers, and to use the results of research to develop new products and services, have also been put in place.



(l-r): Minister Richard Bruton TD, Dr Emmeline Hill, UCD School of Agriculture and Food Science and Minister Sean Sherlock TD at the launch of new IP Protocol. Dr Hill is a co-founder of Equinome, a UCD spin-out company, which has developed out of the successful commercialisation of State-funded research.

Projects encompassing poverty, war and medical history receive IRCHSS postdoctoral fellowship awards

UCD School of History and Archives has enjoyed great success in the latest round of Irish Research Council for the Humanities and Social Sciences (IRCHSS) postdoctoral fellowship awards. The incoming postdoctoral

fellows cover a broad chronological and geographical range; they specialise in a variety of subject matter, encompassing war, poverty, religion, society and identity.

The award-winning projects include Niamh Wycherley's study of relics in early medieval Ireland, Eoin Kinsella's examination of the Penal Laws in eighteenth-century Connacht and Aaron Donaghy's research on the British Government and the Falkland Islands between 1974-79. Intellectual and cultural history will be highlighted in Selena Daly's study of Futurism and the Trentino question in the first two decades of the twentieth century; the role of political violence in Germany, during the same

period, will be the focus of Mark Jones' work. Medical history is represented by Laura Kelly's project concerning the formation of Irish medical students between 1800-1950, while social history is a key component of Carole Holohan's examination of the 'rediscovery' of Irish poverty 1963-74.

This success builds on the School's previous achievement in attracting excellent postdoctoral researchers under the auspices of the IRCHSS CARA fellowships. In the current postdoctoral round UCD School of History and Archives was awarded fully one quarter of all IRCHSS postdoctoral fellowships in the Humanities.



Pictured at Prof Moran's lecture were (from left to right): Prof Mac MacLachlan (TCD), Prof Aidan Moran, Prof Carol McGuinness (QUB; Chair of NIBPS) and Dr Michael Drumm (President, PSI) (photo courtesy of Paul O'Hanlon)

Olympic Torch sparks interest in role of mental practice in sport

Dublin became the only city outside Greece and the United Kingdom to host the Olympic torch, when it arrived in the city on June 6th. To mark this unique historical occasion, the Psychological Society of Ireland (PSI), the Northern Ireland Branch of the British Psychological Society (NIBPS), and Trinity College, Dublin collaborated to jointly host a public lecture by Professor Aidan Moran, UCD School of Psychology, on *Imagination in Action: Mental Practice and Skilled Performance in Sport and Surgery* in Trinity College, Dublin. The purpose of this lecture was to explore how imagination, or the ability to mentally simulate sensations, actions and other types of experience, can enhance the learning and performance of complex skills in fields such as sport and medical surgery. Professor Moran outlined how many top athletes (e.g. Michael Phelps) use "mental practice", i.e. "seeing" and "feeling" an action in one's imagination without engaging in the actual movements involved, to concentrate effectively in competitive sport. He also explored some of his recent studies, with colleagues in Imperial College, London, which show that imagery training can enhance laparoscopic medical surgery skills. Finally, based on the latest findings from imagery research in psychology and cognitive neuroscience, Professor Moran provided some practical tips on using one's imagination to improve skilled performance in everyday life.

Tracking the secretory pathway in cells

Secretion is a fundamental process essential to almost every cell type in the body; delivering hormones into the blood stream, digestive enzymes into the gut, and signalling molecules between cells.

Technology did not permit scientists to catalogue this journey through cell organelles until recently. For the first time, using a combination of genetic and sophisticated microscopy techniques, over 8 million individual cells have been assessed to reveal those genes that influence the transport network or secretory pathway.

"This study is the first genome-wide assessment of the secretory process in a human cell system", explains Conway Fellow, Professor Jeremy Simpson, UCD School of Biology & Environmental Science, co-author of the research paper published in *Nature Cell Biology*.

"In order for us to understand the impact on the body when this fundamental process of secretion goes wrong, we must first decipher the functional network of membrane trafficking pathways within the cell.

Now, using high content screening, we have been able to target 22,000 human genes and track the journey of a specific, fluorescently-tagged protein as it travels through, and out of, over 8 million individual cells."

The UCD team, in collaboration with scientists in the European Molecular Biology Laboratory (EMBL) in Heidelberg, systematically silenced each of our 22,000 genes to observe to what extent this affected the cell's ability to transport a protein.

They found that 15% of human genes somehow influence the secretory pathway including genes that provide a link to other events in and around the cell.

The secretory pathway has the capacity to cope with a wide variety of cargo molecules, and as such utilises extensive regulatory machinery in the process. This study focuses on particular regulatory elements in the early stage of the pathway called the cytoplasmic coat protein complexes.

The major part of funding for this research has come from Science Foundation Ireland, the EU-funded network of excellence, 'Systems Microscopy', and the EU-FP6 MitoCheck consortium.

Behaviour of bird flocks informs new study on geographical flow of music

Researchers from the Clique Strategic Research Cluster have recently studied how taste in music is geographically distributed, and how these preferences spread. To do so, Professor Pádraig Cunningham and Mr Conrad Lee collected data from the social media website last.fm, which provides a detailed snapshot of what its users in hundreds of cities listen to each week. After suitably normalizing this data, they used it to test three hypotheses related to the geographic flow of music. They then adapted a method developed to detect leadership in bird flocks to measure whether some cities are consistently early adopters of new music (and early to snub stale music). The results were surprising: thelast.fm users from large cities such as London or New York do not appear to be ahead of the curve, while users from smaller cities such as Atlanta, Montreal, Oslo, and Stockholm appear to be the most cutting edge. The pre-print of this work can be found on arXiv at <http://arxiv.org/abs/1204.2677>

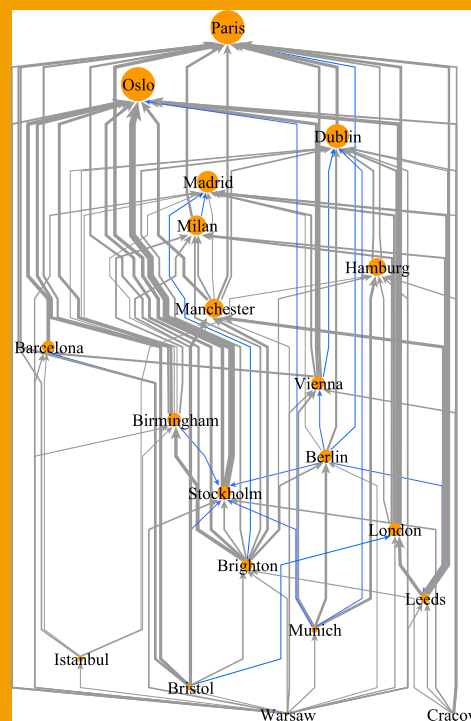


Image from the Clique SRC research paper. This network shows the leaders and followers in indie music in Europe. Paris, Oslo and Madrid are leaders in the pack with Dublin also prominent. Warsaw, Bristol, Istanbul and surprisingly Munich are followers in this pack.

UCD Bloomsday celebrates film with honorary degrees and awards Ulysses Medal to Dr Tony Scott

On Bloomsday, the university awarded honorary degrees to Daniel Day-Lewis, Jim Sheridan, Brenda Fricker, Joan Bergin and Laura Mulvey for their contribution to art through film.

Double Oscar winner, Daniel Day Lewis received the honour for his remarkable body of work, which spans *There will be Blood*, *Age of Innocence*, *Last of the Mohicans*, *My Left Foot*, and the forthcoming *Lincoln*. Director of Day Lewis' Oscar-winning performance, Jim Sheridan's adaptation of Christy Brown's memoirs, *My Left Foot*, in 1989 literally changed how Ireland was seen on film both at home and abroad. Dubliner Sheridan graduated from UCD in 1972 with a BA in History and English where he was involved in acting and directing with DramSoc, the university's dramatic society. Fellow actor in *My Left Foot*, Brenda Fricker's acting career began when she was just nine years old and has spanned 40 years. An Oscar winner for her costume design, Joan Bergin, began her career at the Focus Theatre in Dublin and has worked alongside Fricker, Jim Sheridan and Noel Pearson on many film productions, as well as a body of work that reaches from *Riverdance* to *The Tudors*, taking in Ibsen, Chekhov, Pinter and JB Keane *en route*. Laura Mulvey, professor of Film Theory at Birkbeck, University of London is one of a generation of "activist academics" who combine scholarly thought with social justice, challenging society



Honorees with UCD President, Dr Hugh Brady (centre): Prof Laura Mulvey, Jim Sheridan, Joan Bergin, Brenda Fricker, Daniel Day-Lewis, Dr Tony Scott

to think clearly about popular culture rather than letting it wash over like a wave.

"Film as an art form is truly a powerful medium of expression." The President of UCD, Dr Hugh Brady said. "Today we honour a group who have been pivotal in transforming the international perception of Irish film from caricatured imagery into a modern, urban and often challenging reflection. It is wonderful to have these incredible role models here today for

scholars and students of the UCD School of English, Drama and Film."

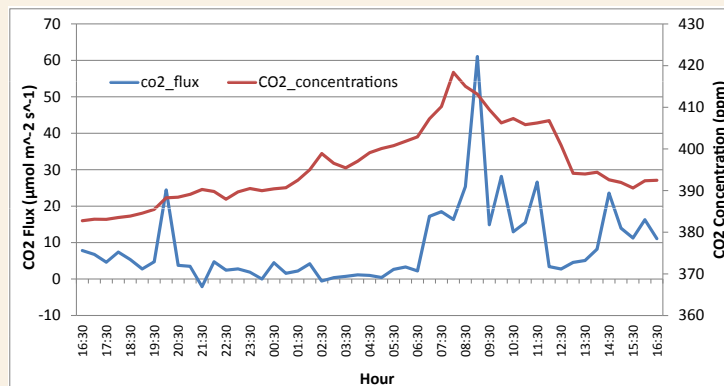
Also honoured at the Bloomsday celebrations was Dr Tony Scott, founder of the BT Young Scientist Exhibition, who was presented with UCD's Ulysses Medal. Delivering the Ulysses citation, journalist Dick Ahlstrom said "I can think of very few who have had a bigger impact on the life of UCD, on the communication of science, and on the youth of the nation than Tony Scott."

Dublin's 'Heartbeat' examined by climate experts

The growth in the field of study of the climates of cities was reflected in the scale of the delegation attending the International Association of for Urban Climates (IAUC) conference, held over a five day period in August in UCD's Health Sciences centre. Dublin won the right to host ICUC8 during the previous conference in 2009 in Yokohama, Japan. Indeed, the largest single nationality represented among the 450 delegates, 95% of whom hailed from outside Ireland, was Japan; a nation with a long history of research into the effects that cities have on climates at all scales.

ICUC8 delegates included meteorologists interested in air quality, climatologists examining the contribution of cities to global climate

change and urban planners/designers invested in creating better cities. The conference was sponsored partly by Science Foundation



This figure shows Carbon Dioxide emissions (in micro moles per sq. metre per second) and atmospheric concentrations (in parts per million) over the course of one day in Dublin, taken from the urban observation site in Kevin St.

Ireland and the Environmental Protection Agency, while the World Meteorological Organization and the European Space Agency sponsored attendance for those from less prosperous countries.

The event was used to inaugurate an urban observation site located on the rooftop at Kevin Street DIT, a key opportunity to advance the Irish element of the debate. The instruments at this site record the fluxes of energy and of carbon dioxide between the atmosphere and the city. The patterns reflect the use of energy, especially by commuters travelling to and from work and the mixing of the atmosphere (which is weakest in the early morning). Globally, more than 50% of the CO2 emitted into the atmosphere originates in cities and this station will help establish the contribution of Dublin city to atmospheric carbon concentrations. It will also aid discussions on policies that aim to reduce the carbon footprint of the city by regulating traffic or planting trees.

ICUC8 was held with the urban meteorology section of the American Meteorological Society. Papers presented at the conference will be available on the IAUC website (www.urban-climate.org) by November.

Online and mobile search capability enhanced by UCD library

As part of its commitment to widening usage and enhancing the value of its over 900,000 average monthly searches, UCD library launched a completely new catalogue in July. Found at <http://library.ucd.ie> the catalogue offers improved search options and related

online services. Featuring a search-engine style approach, inclusion of a range of formats in the results and a wide range of tools to assist users in narrowing or broadening their search results, the catalogue will soon become the one stop shop for resource discovery. UCD library has

also responded to feedback which flagged library search functionality as a top priority addition to the university mobile application UCD Mobile; the new mobile catalogue will be available within the UCD Mobile 'app' interface from the coming semester.

Dr. Barbara Murphy has been passionately interested in horses since she was a little girl. As a youngster she rode out daily and when the time came to decide on a career, she opted to study Equine Science at the University of Limerick.

For work experience during her third year at College, Dr Murphy spent time with the Coolemore Stud at its US base in Kentucky. This was her first introduction to the world of thoroughbred breeding and she was captivated by it. She subsequently became a specialist in the field of equine biorhythms and thoroughbred reproduction and her research has led to the development of Equilume, a therapeutic light mask for horses which is now on the brink of commercial production.

Shining new light on equine innovation

Dr Murphy has been working at UCD since 2007 and is currently head of subject in Equine Science and programme coordinator for the BAgSc in Animal Science - Equine. Prior to this she spent six years in Kentucky working on her PhD and research projects at the prestigious Gluck Equine Centre.

To help progress the idea, Dr Murphy joined UCD's Campus Company Development Programme in 2011 and says this provided "the necessary push to meet specific deadlines and bring the idea to full fruition." The technology transfer team at NovaUCD helped with the identification and protection of the intellectual property arising from the research and the spin-out of Equilume into a campus company is also being supported by Enterprise Ireland. Earlier this year Equilume won the Enterprise Ireland "One to Watch" award.

Globally, thoroughbred breeding is a multi-billion dollar industry spread across five Continents; a product that promises to enhance its breeding programmes has significant commercial potential. The estimated market value worldwide for a product such as the light mask is in excess of €60 million. Since Ireland is the world's third largest producer of thoroughbred foals, there should also be good demand closer to home.

The Equilume mask was successfully trialed on a large scale in the US earlier this year and considerable interest has already been shown in the product by a number of breeders around the world. Dr Murphy is hoping to have the mask made in Ireland and in full-scale production by 2013.

"Had I not had a really good placement at university I wouldn't be where I am now," she says. "As a consequence of my initial placement I have had the opportunity to study and work in the US among the breeding community and have had a lot of exposure to the thoroughbred industry. During my research I spoke to many breeders and farm managers and this helped give me an insight into what would be acceptable in what is still a very traditional industry in many respects. I have also had great support from leading people in the industry such as Dermot Cantillon who is the owner/manager of three



The Equilume therapeutic light mask is displayed on a horse mannequin, with Dr Barbara Murphy, whose research led to the development of the mask

stud farms in Ireland and the USA and who successfully used the light mask this year."

The thoroughbred breeding industry operates within the confines of a very tight breeding and racing calendar. Under industry rules the universal birth date for all foals, regardless of when they are born, is January 1st. This runs contrary to the natural foaling season which is typically June to October.

Because of the universal birth date, breeders try to produce foals as close to January 1st as possible. They currently artificially advance the mares' breeding cycle by keeping them indoors under lights for approximately 12 weeks from December. This represents a big cost to breeders in terms of labour, power and bedding. The Equilume light mask achieves exactly the same result but at a much lower cost. Each mare wears an individual mask, allowing them to stay outdoors in their natural environment.

The mask consists of tiny blue LED lights set into one of the eye cups of a pair of conventional blinkers routinely worn by horses. The battery-operated light operates at low-level intensity over a timed period. This limits the level of the hormone melatonin which is usually produced in darkness and inhibits the mare's reproductive activity during winter months.

A key collaborator with Dr Murphy on the Equilume mask is Professor John Sheridan of UCD's School of Electrical, Electronic and Communications Engineering who specialises in opto electronics. "I had an idea of what I wanted and approached Professor Sheridan whose expertise made it all happen," Dr Murphy says.

Other potential uses of the Equilume light mask include addressing low foal birth weight, reducing gestation lengths in mares due to foal early in the year, enabling competition horses to shed their winter coats earlier in time for the start of the show circuit, and helping race horses and showjumpers who compete on the international circuit overcome equine jet lag.

Because of the universal birth date, breeders try to produce foals as close to January 1st as possible.

Commenting on the success of Equilume to date, Professor Peter Clinch, UCD Vice-President for Innovation says "Equilume is an excellent example of a young spin-out company. They identified a problem in the equine market place and provided a solution, translating an innovative idea arising from a UCD research programme into a commercial entity. The company also has the potential to provide skilled job opportunities."

"I'd like to keep as much of the project as possible in Ireland both now and into the future as the technology has other applications which we will be looking into," Dr Murphy adds. "Right now the focus is on testing the product simultaneously on three Continents and working on refining the prototype and selecting our manufacturing partners. We are doing a bit of juggling around this as in some markets the preference is for leather headpieces whereas in markets such as Japan for example, they are more into synthetics." Dr Murphy says that her short-term plan is to spin out the company by the end of this year and bring an angel investor on board to help support its future development.

Dr Barbara Murphy was in conversation with freelance business journalist Olive Keogh (MA 1984).

Books



Examining Ireland's political, economic and governance crisis

Ireland's rapid shift from economic success story to recession casualty left many to rethink the country's relationship to Europe. However, *Irish Governance in Crisis* argues that the downturn in the economy exposed failures in governance within the country itself which remain resistant to change.

The book, published by Manchester University Press, argues that there is a crisis in the way the Irish state is structured and in the manner in which it relates to the main organised interests in the society. This original study edited by Niamh Hardiman, UCD School of Politics and International Relations and UCD Geary Institute, provides a thorough analysis of the political, economics and governance crisis engulfing the Irish polity since 2008. In a set of carefully researched and intellectually engaged essays the volume's contributors offer both a distinct theoretical understanding of the Irish dimension of the European wide crisis and a major empirical account of how the crisis manifests in a range of policy areas including economic policy, health care delivery, regulation and the environment. Ireland stands as a major case study within the post 2008 systemic and fiscal transformation emerging across the EU polity. Setting out a compelling argument that institutional design matters, especially in an increasingly globalised and interdependent world, *Irish Governance in Crisis* is likely to stand as the most authoritative account of this development in Ireland for some time.



Toward a greater understanding of the human self

Helping clients cope with problems of self is an important goal of modern psychotherapy. However, without ways of understanding or measuring the self and self-relevant behaviour, it's difficult for

psychologists and researchers to determine if intervention has been effective.

From a modern contextual behavioural point of view, the self develops in tandem with the ability to take perspective on one's own and other people's behaviour. This collection of articles, edited by Dr Louise McHugh of the UCD School of Psychology and Ian Stewart of NUI Galway, begins with a complete history of psychological approaches to understanding the self, before presenting contemporary accounts that examine the self and perspective taking from behavioural, developmental, and cognitive perspectives. The articles in *The Self and Perspective Taking*, published by New Harbinger, also explore the role of the self as it relates to acceptance and commitment therapy, cognitive behaviour therapy, and mindfulness processes. Featuring work from world-renowned psychologists, this resource will help clinicians augment self-understanding in clients, especially those with autism spectrum disorders, schizophrenia, and impaired perspective-taking abilities.



Variety and diversity of Irish grasses brought to life

Published by Teagasc and authored by Dr John Feehan and Dr Helen Sheridan of UCD School of Agriculture and Food Science, *The Grasses of Ireland* showcases the variety and diversity of grasses native to this country.

With photography by Damian Egan, UCD School of Biology and Environmental Science and design and layout by Bernard Kaye, UCD School of Agriculture and Food Science, it represents a long awaited illustrated identification guide that is dedicated to Ireland. The book was written for all who work in pasture management and for all who have an interest in Ireland's natural history and heritage but who perhaps feel somewhat daunted by the apparent monochrome similarity of the common grass species, and are accordingly deprived of an appreciation of one of the most fascinating and most important, of all plant families. The book also hopes to help to alert a new generation of readers to the classical grassland research of an earlier age.

"my eyes – they were bone dry. And that's how they are going to stay. Let the rest of them bawl their fill. But that is not going to be my way. I have other things to do."

From *The Match Box*



Love, loss and hate burning bright

The Match Box, a new playscript by Professor Frank McGuinness, Writer-in-Residence, UCD School of English, Drama and Film, invokes the tragic cycle of violence and revenge, bringing to mind Professor McGuinness' work as a noted translator of the Greeks.

Twelve-year-old Mary perished as the innocent victim of crossfire between rival gangs. The perpetrators, believed to be members of the same family, were never brought to trial, but later perished in a suspicious house fire. Whether this represents summary or merely poetic justice is left to the audience to decide.

For principle character Sal, the ties that bind can never be broken; they hang like a noose around her neck, just loose enough to keep a small but potent flame burning inside. In *Sal*, McGuinness has conceived a compelling, tragic heroine: a woman to be pitied and feared in equal measure.

The Match Box premiered at the Liverpool Playhouse in June 2012 and is published as a playscript by Faber & Faber plays



Do the Math! On Growth, Greed and Strategic Thinking

How do pyramid scams work? Are reality television shows fair? Why are sports so uncompetitive? Who really broke the bank in 2009? *Do the Math!*, by former lecturer and research fellow, UCD School of Physics, Dr John K White, is a refreshing look at mathematical concepts and moral dilemmas in the increasingly numerate world of everyday living.

Our world has become more complicated, and the notion of growth at any cost has led to constant economic uncertainty, a permanently stressed-out workforce, and everyday stories of government and corporate corruption. John K. White argues that a better knowledge of basic systems is needed to understand the world we live in, and one place to start is with counting and mathematics. Published by Sage Publications, Inc, *Do the Math!* uses creative examples from literature and the newspaper, to the stock market and the casino to provide a thought-provoking guide to better understanding the world around us.

■ Vitality of Medieval Studies at UCD showcased

The Irish Conference of Medievalists has been in existence for over a quarter of a century as the prestige Irish forum for scholarly exchanges and presentations on Medieval Studies in the broadest sense, especially (but not exclusively) from the insular perspective of Ireland and Britain. In July, UCD School of Irish, Celtic Studies, Irish Folklore and Linguistics hosted the conference for the first time. Over 130 delegates from Ireland, Britain, Western and Eastern Europe, the Russian Federation, North and South America, and Australia, gathered in UCD for an intensive 3-day programme of some 60 lectures. Topics were representative of the broad sweep of medieval studies, including literature, archaeology, moral philosophy, Irish vernacular law, the crusades, art history, linguistics, saints' lives and more; they ranged in

time from the 5th to the 16th century and drew on sources in several languages: Hiberno-Latin, Early and Medieval Irish, Old English, Medieval Welsh and Old French.

Among the high points of the conference were the two plenary sessions, by Mr Charles Doherty of the UCD School of History and Archives on the dating of the lives of Saints Patrick and Brigid, and by Dr Marged Haycock of the University of Aberystwyth on the early medieval Irish settlement in Brycheiniog (Breconshire in Wales). The conference provided an opportunity to showcase the vitality of medieval studies in UCD, as no fewer than 14 papers were given by current or recent UCD post-graduates. The university will host the conference again in 2013.



President of Ireland, Michael D Higgins at the 'Ireland's Champions of EU Research' awards ceremony

■ Three out of five EU Research awards go to UCD researchers

UCD researchers received three of the five special awards presented by the President of Ireland, Michael D Higgins to academic researchers in recognition of their projects which were ranked 1st in Europe in their research areas.

The UCD recipients of 'Ireland's Champions of EU Research' awards were: Dr Louise Dunne, UCD School of Geography, Planning and Environmental Policy, for her leadership of the TURAS project on "Transitioning towards Urban Resilience and Sustainability", ranked 1st in Sustainable and Resilient Green Cities in the Environment area; Professor James Heckman, Nobel Laureate (2000), UCD Professor of Science and Society, UCD Geary Institute, for his leadership of the DEVHEALTH project on "Understanding Health across the Lifecourse: An Integrated Developmental Approach", ranked 1st in European Research Council Advanced Grant in the Ideas area; Dr Jennifer Claire McElwain, UCD School of Biology and Environmental Science, for her leadership of the OXYEVOL project on "Atmospheric oxygen as a driver of plant evolution over the past 400 million years", ranked 1st in the European Research Council Starter Grant in the Ideas area.

The 'Ireland's Champions of EU Research' awards acknowledge the immense contribution of the winners, and of the additional 275 research project leaders from across Ireland (including 48 from UCD), to our national success in the €50 billion EU research fund known as the Seventh EU Framework Programme for Research (FP7).

"UCD researchers have been awarded nearly €50m by the EU during the lifetime of the current Framework, placing UCD within the top 100 of institutions in Europe. This is a remarkable achievement," said Professor Des Fitzgerald, Vice-President for Research at UCD. For more information visit www.fp7ireland.com



At the Media and the Arab Spring conference were (l-r): Prof Liam Kennedy, Professor of American Studies, Director of the UCD Clinton Institute for American Studies, Dr Ayman el-Desouky (SOAS, UK), Prof Caroline Rooney (University of Kent), Prof Scott Lucas (University of Birmingham), Dr Rita Sakr, UCD Clinton Institute fellow, Michael Graae (photojournalist), Prof Joseph Massad (Columbia University), Mary Fitzgerald (Irish Times)

■ UCD Clinton Institute focuses on media and the 'Arab Spring'

The uprisings in the Arab world have revealed the increasingly forceful and transnational impact of the media in the Middle East and North Africa, but they have also served to warn us that the media, both traditional and new, is one element in a complex web of political, social, economic, and intellectual factors that only if brought successfully together, can really and positively bring about a true Spring in the Arab world. Examining this 'web' from several perspectives, the UCD Clinton Institute for American Studies held a two-day international conference in April on the timely topic of Media and the Arab Spring. The conference included a range of academics, journalists, media analysts, and filmmakers who came from the United States, the UK, France, Belgium, Egypt, Tunisia, and Ireland.

The conference opened with a plenary that brought together literature, political critique, and social media activism. In conversation with Rita Sakr, the Tunisian writer Kamel al-Riahi presented a fascinating deconstruction of Taher Ben Jelloun's novel *Par le feu* that presumably recounted the story of Mohammed

Bouazizi. Photojournalist Michael Graae and Professor Liam Kennedy reflected on the challenges and impact of photojournalism on framing and recording the revolutions through a series of moving, iconic photographs from 2011. The three speakers in the following panel offered insightful analyses of the networks created by social and new media, including Twitter and Storyful.

Mary Fitzgerald, the foreign correspondent of *The Irish Times*, discussed her experiences covering the different uprisings and the various obstacles that have faced journalists in this context. The topic of the Egyptian revolution was extended with two complementary presentations by Professor Caroline Rooney (University of Kent) and Dr Ayman el-Desouky (SOAS, London) on aura, rhythm, and the sacred in the visual and verbal media of Egypt's political transformations. Text and image were also the focus of the plenary on "filming the revolution" with papers that covered amateur videos, YouTube filmography, the Cinema of Tahrir, and online reporting of Gaddafi's capture and death. In a thought-provoking final plenary Professor Joseph Massad (Columbia University) used Macchiavelli's theory of the love and fear of the ruler to interpret Arab autocrats' changing relationship to their people and the place of US foreign policy in this context.



At the announcement of SFI 'Principal Investigator' Programme awards, in which 10 of 30 awards went to projects headed up by UCD researchers, were Minister for Jobs, Enterprise and Innovation, Richard Bruton TD and Professor Pat Guiry, UCD School of Chemistry and Chemical Biology, and Centre for Synthesis and Chemical Biology

UCD researchers dominate SFI awards

Some 30 flagship scientific projects have received €39m in funding via the Science Foundation Ireland (SFI) 'Principal Investigator' (PI) Programme. Of the 30 projects awarded funding, announced by the Minister for Jobs, Enterprise and Innovation, Richard Bruton TD, 10 are headed up by UCD researchers.

The 10 UCD researchers to receive the SFI Principal Investigator Awards include:

Dr Hans-Benjamin Braun, UCD School of Physics; Professor Orla Feely, UCD School of Electrical, Electronic and Communications Engineering; Dr Oliver Blacque, UCD School of Biomolecular and Biomedical Science and UCD Conway Institute; Professor Pat Guiry, UCD School of Chemistry and Chemical Biology and Centre for Synthesis and Chemical Biology; Professor Desmond Higgins, UCD School of Medicine and Medical Science and UCD Conway Institute; Dr Emmeline Hill, UCD School of Agriculture and Food Science; Dr Jennifer McElwain, UCD School of Biology and Environmental Science; Professor Donal O'Shea, UCD School of Chemistry and Chemical Biology; Professor Helen Roche, UCD School of Public Health, Physiotherapy and Population Science

and UCD Conway Institute; Professor Cormac Taylor, UCD School of Medicine and Medical Science and UCD Conway Institute.

"These awards are critical to the investment in science and engineering in Ireland" said Professor Des Fitzgerald, Vice-President for Research at UCD, congratulating the UCD awardees. "Our academics should be encouraged by a very strong result for UCD. The community should be encouraged to see the awards supporting fundamental research. This research underpins the priority areas identified by Government in the National Research Priority Exercise and is essential in maintaining a strong science and engineering infrastructure in Ireland."

The Director-General of Science Foundation Ireland, Professor Mark Ferguson, said: "The PI projects for 2012, selected following a highly-competitive, peer-reviewed process, are investigating some of the most important issues facing humanity today."

The breakdown of the programme awards across 11 Research Bodies is: UCD (10); TCD (7); UCC (2); Tyndall National Institute Cork (2); NUI Maynooth (2) UL (2); Cork Institute Technology (1); NUI Galway (1); DCU (1) DIT (1) and Teagasc (1).

Taoiseach commends DARE and HEAR schemes for broadening access to higher education

Recognising the success of the Disability Access Route to Education (DARE) and the Higher Education Access Route (HEAR) in increasing the numbers of students entering third level with disabilities or from disadvantaged backgrounds, An Taoiseach, Enda Kenny T.D. presented a Public Service Excellence Award to the two schemes at a ceremony in Dublin Castle in June. Since the schemes were opened up to all secondary school students nationwide in 2009 HEAR has seen a 154% increase in applications and a 103% increase in acceptances. The number of acceptances of a college place through DARE has risen by over 300% from 214 in 2009 to 753 in 2011.

Eighteen higher education institutions, including UCD, operate the schemes with support from the Department of Education and the Higher Education Authority (HEA). Accepting the award on their behalf, Cliona Hannon, Chair of the DARE & HEAR strategic development group said: "The DARE & HEAR schemes are a fantastic example of how higher education institutions can work collaboratively in the public interest. The schemes have significantly increased the number of talented, ambitious young adults with a disability or from a socio-economically disadvantaged background progressing to degree courses and this outcome will continue to have an impact on their families for generations to come. We are delighted the schemes are receiving national recognition."

George Bernard Shaw: 'Back in Town'

At the opening of the first Irish International Shaw conference in the National Gallery of Ireland, President of Ireland, Michael D. Higgins maintained in relation to Nicholas Grene's assertion that George Bernard Shaw 'for so long remained the invisible man of Irish Theatre', that relegation might be a more appropriate word. A conference in late May entitled *G.B. Shaw: Back in Town*, set about changing that status. President Higgins was accompanied by the First Lady, Sabina Higgins and was introduced by UCD President, Dr Hugh Brady. The keynote speech was delivered by Professor Nicholas Grene of Trinity College Dublin with an introduction by Professor Leonard Connolly, President of the International Shaw Society.

The theme of the conference centred on Shaw's Irish identity and how his Irishness was reflected in the playwright's work. Professor Grene and Professor Anthony Roche, UCD School of English, Drama and Film, spoke

eloquently on Shaw's theatricality while Dr Nelson O'Ceallaigh Ritschel, Associate Professor of Humanities at the Massachusetts Maritime Academy and author Peter Gahan interrogated Shaw's nationalist leanings and all provoked a renewed interest in the workings of the mind of the dramatist. Presentation panels were diverse and varied; all leading to extremely lively discussion and debate.

Sponsored by the UCD Humanities Institute, the International Shaw Society (ISS) and the School of English, Drama and Film; the UCD John Hume Institute for Global Irish Studies played host to two more days of plenary speeches and presentations before the conference concluded in Dalkey Castle with a plenary by Professor Roche and a professional reading of *The Tragedy of an Elderly Gentleman* adapted and directed by Dr David Clare, UCD School of English, Drama and Film.

■ Four from UCD receive prestigious Fulbright awards

Jointly funded by the Irish and US governments under the *Ireland-United States (Fulbright) Commission for Educational Exchange*, Fulbright scholarships have provided Irish students, scholars and professionals with the opportunity to study, lecture and research at top universities and institutions in the U.S. since 1957. This year, a record number of 37 Irish Fulbright Awards were announced, including four from across UCD. These included:

Dr. Don Bredin, a Senior Lecturer in Finance at the Graduate School of Business, UCD. Dr. Bredin will undertake research at the Massachusetts Institute of Technology, Center for Energy and Environmental Policy Research.

Shane Kiernan is the Fulbright – CRH Awardee in Business Studies (€20K). Shane holds a BBLs from UCD and a Masters degree from Cass Business School, London. He will undertake a Masters degree in Health Policy and Management at the Harvard School of Public Health.

Breandán Mac Ardghail teaches Nua-Ghaeilge at UCD. Breandán will be a Fulbright Foreign Language Teaching Assistant at the University of Montana.

James Maher is currently completing a Masters on full scholarship in Irish and Communications at UCD. Having taught first year students at UCD for the past year, James will now teach Irish as a Fulbright Foreign Language Teaching Assistant at the University of St. Thomas in Minnesota.

For more information visit www.fulbright.ie.

■ Minister pays tribute to Electricity Research Centre at UCD

The Minister for Communications, Energy and Natural Resources, Mr Pat Rabbitte TD delivered the opening address at the Research Symposium of the Electricity Research Centre (ERC) at University College Dublin. Commending the work of the ERC, the Minister said: “The work that is done here is very relevant to the issues that Ireland’s electricity network experiences today.”

In particular, the Minister referred to an all island report conducted by the ERC in cooperation with the Department of Communications, Energy and Natural Resources, which showed that as much as 42% of electricity could be delivered by intermittent renewable energy sources.

The mission of the ERC is to overcome challenges related to energy provision and climate change, and to build human capacity in this crucial sector. The industry-university research collaboration is based in Electrical Engineering at UCD with an Energy Economics branch at Trinity College Dublin.

It is governed by a board chaired by Mr Michael Tutty, Chair of the Commission for Energy Regulation, and made up of the industry members and representatives from the Department of Communications Energy and Natural Resources, the Economic and Social Research Institute (ESRI) and Sustainable Energy Authority of Ireland (SEAI).

■ Barrington Medal for UCD economist

Under the auspices of the Barrington Trust, the Council of the Statistical and Social Inquiry Society of Ireland has awarded UCD economist Dr Orla Doyle the 2011/2012 Barrington Medal in recognition of her promising research in the economic and social sciences.

Each year, the award winner delivers the Barrington Lecture which focuses on a topic with current relevance to economic or social policy in Ireland. In her lecture, Dr Doyle, UCD School of Economics, and the UCD Geary Institute, outlined how deprivation early

in life leads to multiple long term consequences for both the individual and society. She highlighted the increasing body of evidence which shows that targeted, early interventions aimed at at-risk children and their families can reduce socioeconomic inequalities in children’s skills and capabilities.

Dr Doyle described the evaluation of a five-year community-led early childhood intervention programme aimed at improving the school readiness skills of socioeconomically disadvantaged children in Ireland: The *Preparing for Life (PFL)* programme.

■ UCD hosts thirtieth anniversary Canadian Studies conference

‘Landscapes and Landmarks’ was the theme of the Association for Canadian Studies in Ireland (ACSI) biennial conference, hosted by UCD in May. Marking the 30th anniversary of the ACSI, the conference welcomed over seventy international and national delegates, including colleagues from UCD.

Professor Maeve Conrick, Principal of the UCD College of Arts and Celtic Studies and President of ACSI, opened the conference and welcomed His Excellency, Loyola Hearn, Ambassador of Canada to Ireland. The Ambassador awarded grants under the Government of Canada’s ‘Understanding Canada Program’ to seven Irish scholars including Professor Maurice Bric, Dr Adrian Brock, Dr Emily Mark-Fitzgerald and Dr Charles-Ivar McGrath from UCD. The Canadian author, Kate Pullinger, gave a reading, sponsored by the Craig Dobbin Professor of Canadian Studies at UCD. Also in attendance was Mme Brigitte Bertout of the *Délégation générale du Québec*, who awarded the Prix du Québec to Dr Isabelle Lemée, a graduate of UCD.



At the ACSI conference in May were (l-r) Prof John Kelly, Executive Director Ireland-Canada University Foundation and former Registrar UCD, Profe Jane Koustas, Craig Dobbin Chair of Canadian Studies, UCD, Prof Maeve Conrick, College Principal, UCD College of Arts and Celtic Studies and President of ACSI, Prof David Wilson, University of Toronto, Keynote Speaker, Prof Seamus Smyth, President Emeritus NUI Maynooth and Joint Chairman Ireland-Canada University Foundation



At the UCD School of Law's Annual John M. Kelly Memorial Lecture were (l-r) Mr. Nick Kelly, Prof Gráinne de Búrca, Professor of law at New York University Law School, Prof Colin Scott, Dean UCD School of Law.

Appraising the EU experiment after 60 years

What is the European Union for? What is it's raison d'être? These questions were raised during the UCD School of Law's annual John M. Kelly Memorial Lecture, by guest speaker Professor Gráinne de Búrca. The Florence Ellinwood Allen Professor of Law at New York University Law School, Professor de Búrca is an alumna of the UCD School of Law (BCL) and was previously Professor of Law at Harvard Law School, Fordham Law School, and at the European University Institute in Florence. During the lecture, entitled "Appraising the EU Experiment after 60 Years" she examined the development of the European Union over the period and shared some thoughts about what paths it might take through and beyond the current crisis.

Professor de Búrca pointed out that this had been clear 60 years ago when the foundations for the EU were first laid and when the goals of peace, prosperity and supranationality were widely shared and clearly understood. Over time, however, the EU had delivered significantly on these three goals and its achievements in this respect were largely taken for granted. Despite its achievements, the EU had persistently failed to earn the kind of unquestioned legitimacy that nation states in Europe enjoy. The EU was still expected to justify itself in terms of the outputs it can deliver for ordinary people and was not taken for granted or accepted as a legitimate polity but is constantly judged on its performance and outputs. The current economic crisis was exacerbating this problem, since the EU was now seen to be hindering prosperity, even if the causes of the crisis are multiple and complex and do not rest only or mainly with the EU.

Boost for the Business of Biotechnology

Elan, whose global business centres on developing drugs for neurodegenerative and autoimmune diseases, has made a donation of over €3 million to the university, to build capacity at the interface of business and technology disciplines such as science and engineering.

In July, two scholarships at UCD in the 'Business of Biotechnology' were announced; named in honour of Kieran McGowan, former head of the Industrial Development Authority of Ireland (IDA) and Kyran McLaughlin, deputy chairman of Davy Stockbrokers. Elan's endowment will also fund an annual 'Business of Biotechnology' lecture series, named in honour of Laurence Crowley, the well-known accountant and board member of many Irish companies and organisations.

The donation will also establish a new Elan Chair in the 'Business of Biotechnology' to provide academic leadership in this strategically important area. The new professor will be a joint appointment between UCD Business School and UCD College of Science. The appointee will be charged with bolstering the

science/technology content of the Business School curriculum and enhancing the business and innovation content of the science curriculum. They will also develop specialised masters programmes and other graduate courses in the business of biotechnology.

"As an Irish-based neuroscience biotechnology company that operates on a global scale, we understand the opportunities and challenges of this business more than most and are delighted in this instance to be in a position to share both financial support and experience with UCD to help create the next generation of biotech leaders out of Ireland," said Kelly Martin, chief executive officer, Elan. "We chose UCD as our academic partner in the business of biotechnology because of the university's track record in driving an innovation culture among its scientists."

According to Mr Martin the potential for biotechnology is enormous and the current focus of the sector is on the expansion of research and discovery activities to complement Ireland's established strength in manufacturing. Consequently, the Elan/UCD business of biotechnology initiative will open opportunities for scientists in Ireland who wish to commercialise their work.



UCD scholars newly enrolled to the Royal Irish Academy (l-r): UCD Professor of Animal Reproduction, Patrick Lonergan; UCD Professor of Meteorology, Peter Lynch; President of the RIA, Professor Luke Drury; UCD Professor of History, Robert Gerwarth; and UCD Professor of Political Science, Richard Sinnott. UCD Professor of Politics, John Coakley was enrolled in absentia.

Five UCD academics enrolled as members of Royal Irish Academy

The Royal Irish Academy (RIA) has recognised the internationally renowned accomplishments of five UCD scholars by enrolling them as members of the academy alongside 17 other scholars.

At the enrolment event, the President of the Royal Irish Academy, Professor Luke Drury, urged the government to make greater use of the resources available to it in the academic community, so that it can develop new and creative solutions and avoid the danger of 'group think':

"The State can, and should, turn to the academic community for expert advice, at far less cost than commissioning expensive consultants, and thereby support genuinely independent and occasionally critical voices," he said.

The UCD scholars newly enrolled to the Royal Irish Academy include: John Coakley, Professor of Politics at the UCD School of Politics and International Relations; Robert Gerwarth, Professor of History at the UCD School of History and Archives; Patrick Lonergan, Professor of Animal Reproduction at the UCD School of Agriculture and Food Science; Peter Lynch, Professor of Meteorology at the UCD School of Mathematical Sciences; Richard Sinnott, Professor of Political Science at the UCD School of Politics and International Relations.

For 227 years, membership of the Royal Irish Academy has been keenly competed for, as it is the highest academic honour in Ireland and a public recognition of academic achievement. There are now 466 members of the Academy, in disciplines from the sciences, humanities and social sciences.



Annalise Murphy



Arthur Lanigan O'Keeffe

UCD salutes Olympian students and graduates

Six UCD students and graduates, Annalise Murphy, Arthur Lanigan O'Keeffe, Ger Owens, Deirdre Ryan, Derval O'Rourke and Joanne Cuddihy, were among the Irish team for the London 2012 Olympic Games.

"We are extremely proud of our students and graduates who represented their country." President of UCD, Dr Hugh Brady said. "It was a fantastic Olympic Games for Ireland and we thank our team for their outstanding efforts."

Annalise Murphy, the 22 year old UCD science student and Ad Astra Elite Athlete, came first in the first four races but suffered the disappointment of a fifth place in the Laser Radial Sailing medal race to finish fourth overall. It was an impressively brave effort and an excellent Olympics for Murphy.

"I had a brilliant week. My first two days of this event, nobody could beat me so I don't think it gets much better than that. I'm only 22. All the

girls are much older than me in the fleet. I'm going to work so hard for 2016 and hopefully I'll be able to come good then." Murphy said.

Arthur Lanigan O'Keeffe finished in 25th place in modern pentathlon. The 20-year-old UCD Sports & Exercise Management student and Ad Astra Elite Athlete was lying 18th, out of 36 contenders, following the fencing, swimming and show jumping disciplines. Some shaky shooting, however, in the final combined event moved him out of the top 20 - his targeted final position. He confirmed afterwards that he intends to compete in Rio in four years time. "I went into the competition with no expectations and came out with a satisfactory result," he told RTÉ. "I gained a lot of experience and I'm really happy."

Ger Owens, a UCD BA geography and MSc business graduate, represented Ireland in sailing. Ger along with team mate in the mens 470

class, Scot Flanigan, finished 23rd overall with a net total of 173.

Deirdre Ryan, a former scholarship student and who attended UCD at both undergraduate and post graduate levels competed in the high jump. Deirdre successfully jumped 1.80 and 1.85, but missed at 1.90m.

Derval O'Rourke, a former sports scholar and student at both undergraduate (Arts), post graduate (Dip. in Business) and Masters levels, competed in the 100m hurdles. Derval made a fantastic start to the 100m hurdles semi-final, but failed to qualify for the final.

Joanne Cuddihy, a graduate of medicine and former scholar throughout undergraduate studies, competed in the 400m and 4x400m relay. Joanne did not advance to the final of the 400m as she finished 5th with a semi-final time of 51.88. In the 4x400m the team did not make it out of the heats but set a new season's best of 3:30:55.

2012 Sport Awards honour over 450 students

At the UCD Athletic Union Council Sport Awards ceremony held in May over 450 students from 27 different sports clubs were honoured by the university for their sporting achievements over the previous twelve months.

A number of special awards were presented on the night. The Rugby Club was named the "Elite Club of the Year" for the second year in a row in recognition of its outstanding competitive success during the period, while the Ladies Hockey first team was named the "Elite Team of the Year".

Veterinary student, Niamh Field was awarded the 'David O'Connor Memorial medal' for her achievements in Athletics.

International athlete Ciara Everard was named as the "Dr. Tony O'Neill Sports person of the Year", in recognition of her victory at both the Indoor University Championships and National Championships in the 800m. Ciara also broke the Sonia O'Sullivan's Under-23 national record at the University Championships.



UCD ladies hockey team: Senior Cup Champions

Senior Cup Championship for UCD Ladies Hockey

The UCD Ladies Hockey team claimed the prestigious title of Electric Ireland Irish Senior Cup Champions in May with a 3-2 win over Loreto with goals from Niamh Atcheler, Rachel O'Reilly and Anna O'Flanagan.

This concluded the end to a fantastic season for the team as they also claimed a number of other distinguished honours. These include the Leinster Division 1 Cup and League double and the Chilean Cup, beating Queens University in the final.



Rebecca Dwyer, one of three UCD students who took part in the 'Washington Ireland Program', pictured in Washington DC

UCD students on Washington Ireland Program 2012

Three UCD students were selected from more than 400 applicants to join the Washington Ireland Program (WIP) 2012. Each year, the successful candidates, who have shown a commitment to service and a track record of leadership, take part in an eight-week internship and leadership training program in Washington DC.

The program aims to help the students to develop their skills through work experience, educational opportunity, and hands-on citizenship both at home and in the US.

The three UCD students selected for WIP 2012 are: Rebecca Dwyer, a second-year

Chemical & Bioprocess Engineering student; Conall Devlin, a second-year Business & Law student and Christopher Day, a third-year General Nursing student. Speaking from Washington, Rebecca Dwyer said: "I'm mixing with students from Cork, Galway, Dublin, Northern Ireland and the UK who have all achieved so much. It may sound cheesy but I can honestly say I have made lifelong friends here."

Each year, thirty students in full-time third level education in Ireland, Northern Ireland and the UK are selected for the Washington Ireland Program.

International recognition for UCD Choral Scholars

The UCD Choral Scholars were awarded a special jury prize and two medals for second place in both the 'Mixed Choir – a cappella – with compulsory piece' competition category, and 'Sacred Music' competition category at the *Concorso Corale Internazionale 12th International Choir Competition in Riva del Garda, Italy* this spring.

In their debut performance in an international competition against thirty-seven other choirs, the UCD Choral Scholars programme included eight choral works by Irish and international composers, as well as two joint performances with ensembles from Japan and Estonia.

A special jury prize (*Premio Speciale*) was awarded for their performance of *Beati quorum via* by Dublin-born composer Charles Villiers Stanford (1852-1924).

"Participation in the *Concorso Corale Internazionale* in Riva was an exhilarating experience for our students, who can stand tall over their record of two medals and a special jury prize from the international jury" said Desmond Earley, Artistic Director, UCD Choral Scholars.

Dairy Business leaders of the future receive scholarships

The Irish dairy industry makes a major contribution to the Irish economy adding in excess of €2bn to food exports and employing over 30,000 between dairy farmers, those in the processing industry and employees in ancillary services. The industry is predicted to undergo significant change over the coming years with a contraction in dairy farm numbers but a significant expansion in farm and herd size, accelerated by the abolition of the dairy quota in 2015.

In response to the changes taking place in the dairy industry in Ireland and worldwide, the Dairy Business degree programme was developed by the UCD School of Agriculture and Food Science, in consultation with relevant stakeholders, in 2009. Designed to provide students with a high level of scientific, technical and business skills, the programme equips these future dairy industry leaders with the necessary knowledge and skills base to cope with this business and enterprise expansion.

In July 2012, six students from the UCD Dairy Business programme received scholarships at an event in the Irish Farm Centre. Conor Goulson of FBD presented FBD travel sponsorships to Nigel Daunt, Kate Bugler, and James Moloney. John Grogan of the Irish Farmers Journal presented scholarships to Nicky Byrne, Niall Brennan and Robert Lynes.



Inspiring the crowd at an education rally in South India were Emma Fryday (Physiotherapy), Jenni Monahan (Physiotherapy), Laura O'Philbin (Psychology), Colm Egan (Commerce), Sorcha O'Brien (Nursing), Kevin O'Byrne (BA International), Paul O'Sullivan (Psychology), Aoife Hyland (Physiotherapy) and Erica Walsh (Physiotherapy)

Ten years of volunteering overseas

UCD Volunteers Overseas (UCDVO) celebrated its 10th Anniversary in 2012 and over the course of the summer, 100 volunteers who participated in the 2011/12 UCDVO programme continued working on community development projects in India, Haiti, Nicaragua and Tanzania. Projects included the construction of houses, schools, agricultural storage centres, and latrines; teaching in primary, secondary and non-formal schools; implementing physiotherapy projects in shelters and care homes for the disabled and marginalised; setting up computer labs and implementing a computer training programme for teachers; and running summer

camp for children living in disadvantaged areas. UCDVO has long-running relationships with partner organisations in each of the locations where projects are carried out, ensuring careful project planning and allowing for real investment in initiatives proposed by the local communities.

UCDVO extended its appreciation to everyone within the UCD community who has supported their work over the past 10 years and would like to encourage more staff and alumni to get involved in the programmes. For more information please contact caroline@ucdvo.org / 7168570.