AUTUMN 2009

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SLEEP MONITORING capitalising on a business opportunity

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11. ULYSSES AND US bringing Joyce to the masses

FUNGAL INFECTIONS IN HOSPITAL

7.

preventing the spread

Bloomsday honours for Ireland's greatest playwright, Brian Friel

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OCCASIONS OF SIN unravelling Irish sexuality

# stoday

# what's inside ...



Professor Diarmaid Ferriter (pictured above) tells Declan Cashin what he discovered through his study of 160 vears of Irish sexuality

Claire O'Connell learns how the work of Professor Geraldine Butler (pictured above) could keep hospital equipment clear of fungal infection

Professor Declan Kiberd (pictured above) is convinced that anyone can, and should, read James Joyce's Ulysses. Louise Holden finds out why

Olive Keogh speaks with BiancaMed co-founder Conor Hanley (pictured above) about how his company can improve sleep quality

# Why university rankings matter

UCD's consistent move upwards in the Times Higher Education QS World University Rankings has attracted considerable external attention, so, while we preface our reaction with the caveat that ranking tables are fraught with anomalies and can never really measure the true impact of a university, we also acknowledge that they do influence the perceptions and decisions of a variety of groups including prospective international and local students, prospective staff and academic collaborators, employers and funders.

The heaviest weight given (40%) in the THE QS rankings is to the academic peer review undertaken by over 9,000 academics over five areas: Arts & Humanities, Social Sciences, Engineering & IT, Life Sciences & Biomedicine, and Natural Sciences. The expansion of the pool of academics (from 6,000 in 2008) improves the breadth of this measure and reinforces the importance of international publication and collaboration. UCD moved up 9 places in this category this year.

The employer review survey asks about graduate employability and once again UCD did well under this measure. More importantly, given the downturn in the Irish economy, the rise in unemployment and the fall in starting salaries for graduates, the employability of UCD graduates rather than quantitative statistics may provide an important nuance next year as it attempts to even out what the compilers of the rankings call 'local economic factors'.

Over the past five years, UCD has consistently risen through this ranking, moving from 221 in 2005 to 89 this year. The higher up the table, the harder it is to make large leaps forward. To be inside the top 100 is to be within a recognised band of quality. Entering this band represents international acknowledgement of the value of the teaching and learning provided through Horizons as well as the quality of research output from the university. Sometimes it does take outsiders to make us believe in ourselves.

Thanks to:

omissions should be

Marsh, Damien McLoughlin, Patrick Wall

suggestions for articles in future editions.

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

Eilis O'Brien Director of Communications



#### Cover Image

Poet Seamus Heaney (left) congratulates Brian Friel (right) on Bloomsday 2009, when Friel received the UCD Ulysees Medal

# 6

#### Contributors

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In the compilation of this publication, every care has been taken to ensure accuracy. Any errors or

brought to the attention of UCD University Relations (communications@ucd.ie). We also welcome your

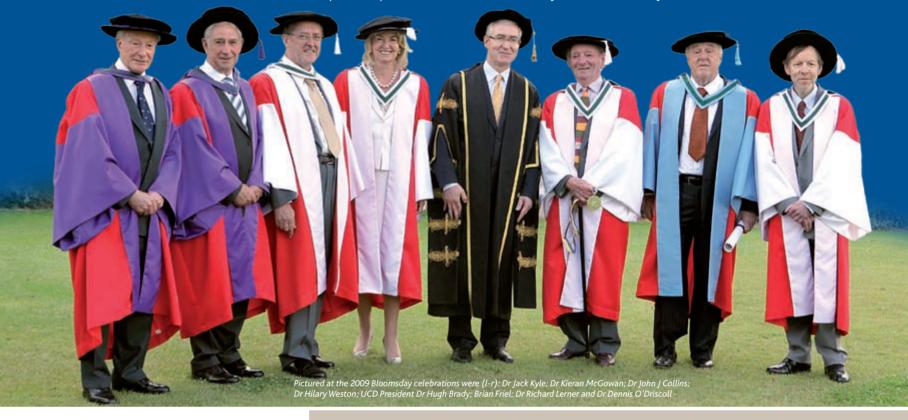


# **Bloomsday Celebrations at UCD**

Brian Friel, author of *Philadelphia, Here I Come* (1964), *Aristocrats* (1979), *Translations* (1980) and *Dancing at Lughnasa* (1990), was presented with the UCD Ulysses Medal on 16th June 2009.

"In honouring Brian Friel, this Bloomsday, with the UCD Ulysses Medal, University College Dublin is honouring the achievements of a man who is not only Ireland's greatest living playwright but one of the greatest playwrights in the world," said Professor Anthony Roche who read the citation. Friel was joined at the ceremony by the six

outstanding individuals who were conferred with honorary doctorates at the Bloomsday celebrations. Jack Kyle, legendary sportsman and surgeon, was awarded an honorary Doctor of Laws; Hilary M Weston, business woman, public servant and philanthropist was <u>conferred with an honorary</u> Doctor of Literature; John Joseph Collins, scholar in near-eastern apocalyptic writings received an honorary Doctor of Literature; an honorary Doctor of Laws was awarded to Kieran McGowan, public servant and industrial development leader; Dennis O'Driscoll, poet and critic received an honorary Doctor of Literature; and Richard Lerner, scientific scholar and discovery researcher received an honorary Doctor of Science.



#### 3 UCD Conway fellows in Cancer Research Cluster

A new Cancer-Focused Strategic Research Cluster (SRC) is to be established, with €5.6 million funding from Government through Science Foundation Ireland. The development was announced by Minister for Science, Technology & Innovation, Mr Conor Lenihan TD in June 2009.

The SRC in Molecular Therapeutics for Cancer will assemble and build a fully-integrated national translational cancer drug discovery and development programme that will significantly benefit cancer patients in Ireland.

Three of the four co-principal investigators in the new SRC, which is under the leadership of Consultant Medical Oncologist, Professor John Crown, with Dublin City University as lead academic institution, are UCD Conway Institute Fellows: Professor Joe Duffy, who aims to develop new treatments to prevent the spread or metastasis of breast cancer; Professor William Gallagher, who brings specialist expertise in the use of in-depth functional interrogation approaches at both in vitro and in vivo levels; and Professor William Watson, who will look at development of androgen independent prostate cancer and advanced disease.

The fourth co-principal investigator in the SRC is Dr Judith Harmey, Royal College of Surgeons in Ireland.

## **PD Papers in UCD Archives**

The records of the Progressive Democrats party, which was disbanded in 2008, were placed in the care of UCD Archives in June 2009. Handing over the collection, Minister for Health, Mary Harney TD said that the influence of the Progressive Democrats was evident in many ways, from influencing the historic settlement of relations between all traditions on the island of Ireland to reforming public services and ending selfregulation of professionals.

"The archives constitute a very significant body of material documenting all aspects of the Party's activities throughout its existence. It is unique insofar as it documents comprehensively the complete lifecycle of a modern political party," said Seamus Helferty, Principal Archivist at UCD Archives.

The collection includes 150 boxes of conventional textual documents such as Parliamentary Party minutes and National Executive minutes, supplemented by a wealth of audio-visual records. It is particularly rich in photographic and visual material from election campaigns and conferences. Cataloguing the papers will take two years, after which the majority of the collection will be available to researchers.

"The decision of the Progressive Democrats to deposit their papers in UCD builds on the archives collection held by the university which includes the Fianna Fáil and Fine Gael parties' papers." said Professor Ronan Fanning, UCD's Director of Archives Acquisitions, "it is a tribute to the reputation of UCD Archives as the most important repository for political papers in the State.





# **Go-ahead for UCD Science Centre**

Work is expected to start in 2010 on a major capital project to upgrade laboratory and teaching facilities for undergraduates and graduates at UCD following approval for the project by the Minister for Education and Science, Batt O'Keeffe TD in July 2009.

Announcing the move to detailed design stage, Minister O'Keeffe said the project is a major cornerstone of the Government's plan to build the 'smart economy'.

The investment will transform the teaching environment for over 2,000 undergraduate students and 525 postgraduates in science and engineering. It will involve refurbishment of 8,600 sq/m of existing outdated 1960s facilities and their integration with 10,000 sq/m of new facilities. The original science facilities were opened in 1964 to accommodate 325 students. At this stage they require considerable upgrading and expansion to meet modern standards for teaching and education. The proposed new dedicated teaching building (Element B) will enable the University to relocate undergraduate teaching activity from Science Centre South, Ardmore House and the Conway Institute.

The new facilities will support both training in fundamental disciplines such as mathematics, chemistry and biology and important programmes

in more applied areas such as biopharmaceutical sciences, ICT and environmental sciences.

"The quality of the students graduating from these programmes will be an important determinant of the long term sustainability and competitiveness of Ireland's ICT and biotechnology sectors," said Minister O'Keeffe.

In 2007 UCD's application for funding of Element A of the Science Centre for postgraduate training and research was funded ( $\in$ 17.5 million) through PRTLI. Element A of the Science Centre is almost complete so the next phase in the project is to move ahead with Elements B and D.

# Dr Blaze O'Connor

Dr Blaze O'Connor, NUI Post-Doctoral Fellow in the UCD School of Archaeology, died of cancer in Leicester on 8th August 2009. Born in 1975 on Waiheke Island in New Zealand, Blaze had an outstanding undergraduate and MA career at the University of Auckland. Her MA research included fieldwork in Hawai'i, investigating residential features and the symbolization of community boundaries.

After working in archaeology in Britain and Ireland, Blaze began her PhD in UCD in 2001 with an IRCHSS Government of Ireland scholarship and a UCD Open Postgraduate Scholarship. Her thesis was on the landscape context of prehistoric rock art in Ireland; how people created a sense of place through carving abstract motifs onto natural rock outcrops and boulders. She pioneered new approaches to the study of rock art and its place in the landscape. In 2004-5 she held a one-year lecturership in the UCD School of Archaeology.



In 2006 Blaze was appointed as a post-doctoral fellow in the Humnaities Institute of Ireland, working on the Memory, Meaning and Identity programme. With international collaborators she explored how prehistoric peoples' engagement with stone underpinned their sense of identity and the creation of memory. The results of this work is now being published in the *Materialitas* volume of The Prehistoric Society Research Paper series.

She made an outstanding contribution to the success of the Sixth World Archaeological Congress held in UCD in 2008, in her role as Associate Academic Secretary. Also in 2008, she was awarded a two-year NUI Centenary post-doctoral fellowship to develop her rock art studies in new directions. Blaze lived a life full of achievement and was meticulous in everything she did. She will be long remembered. GC

# Irish Technology Leadership Group in Washington

The UCD/TCD Innovation Alliance and the Silicon Valley-based Irish Technology Leadership Group (ITLG) have agreed to collaborate on a number of projects aimed at creating an innovation eco-system in Ireland.

Beginning October 2009, the ITLG will provide mentors to and participate in innovation workshops on the TCD/UCD Innovation Academy graduate training programme.

The ITLG will also participate in a diligence process to maximise the partnership's joint potential to foster innovation and to create new businesses.

In a move designed to attract investors and funds from both the US and Ireland, under the aegis of the ITLG, a new operation: Irish Technology Capital (ITC), will open offices in San Jose, California and in Dublin. ITC aims to attract \$100 million venture funding and will be co-led by Chairman of ITLG, Mr John Hartnett and Silicon Valley venture capitalist, Dr Richard A Moran. The venture capital fund will focus on high-potential Irish start-ups.

The development of the Irish Tech Center at a site in San Pedro Square, San Jose, is to be led by Mr Tom McEnery, former mayor of the Silicon Valley capital.

The meeting was the second between the groups, following the signing of a Memorandum of Understanding in Dublin, last June. The partners have now set out their agenda for implementing close and deep collaboration between Ireland's universities and Silicon Valley's global technology companies, entrepreneurs and venture capitalists.

Commenting on behalf of the Innovation Alliance, the President of UCD, Dr Hugh Brady said: "The multiprong partnership between the ITLG and the Innovation Alliance will drive a fundamental change in PhD training and business development that should establish Ireland as a European hotbed of innovation and enterprise creation."

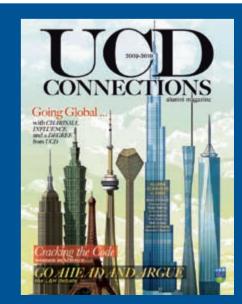
# All schools to benefit from Access scheme

A third-level admissions scheme targeted at school leavers from disadvantaged backgrounds has been extended to include all 730 secondary schools in Ireland.

Until 2008, the Higher Education Access Route (HEAR) scheme was primarily reserved for students from the 305 DEIS schools. The number was expanded in 2009, and this new move recognises that educational disadvantage can affect all communities and is not confined to clearly identifiable areas or regions.

Under HEAR, each of the seven universities, DIT and the seven colleges of education allocates a quota of admission places on a reduced points basis for students from disadvantaged socioeconomic backgrounds. The HEA National Access Office targets, launched in 2008, aim for an entry rate of at least 54% for all socio-economic groups by 2020.

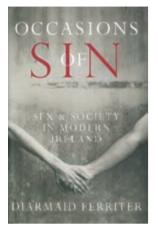
"HEAR is an affirmative action programme that will play its part in reaching targets set out by the government in the national plan for equality of access to Higher education," says Fiona Sweeney, Co-ordinator of New ERA (the equal right to access programme) at UCD. "Since 2000, over 500 students have completed their studies at UCD as part of the HEAR scheme."



UCD Connections, the magazine for the university's 120,000strong alumni community, was relaunched in September 2009. Read articles and order a copy at www.ucdconnections.ie

# **Sex and Society**

Irish history has never been sexier - quite literally - than it is in the fascinating and often startling new book from Diarmaid Ferriter, Professor of Modern Irish History in UCD. Declan Cashin (MA 2004) speaks to Ferriter about the complex history of Irish sexuality.



Sex and Society in Modern Ireland is a comprehensive and compelling study of Irish sexual mores from 1845 right up until 2005, charting a tumultuous and open-ended journey characterised by sexual repression

Occasions of Sin:

and hypocrisy, tentative reform and liberation, and post-millenial sexual saturation.

Throughout the book, Ferriter draws on an extensive array of original sources, including court cases and newspaper reports, as well as literature and pop cultural material, in an attempt to extrapolate a set of specific characteristics and attitudes unique to the Irish sexual experience.

It's a momentous task for any historian, but the first task for Ferriter was to dismiss former Fine Gael TD Oliver J. Flanagan's famous remark that there was no sex in Ireland before television. The historian is also quick to point out that it's too easy to simply lay all the blame for our sexual problems and neuroses at the door of the Catholic Church.

"I think a lot of it comes back to economics, as well as religion," says Ferriter. "If you look at the post-Famine period, there was a reluctance to marry based on the preoccupation with land and inheritance. The eldest son would inherit, and the options for the other children were to go into the priesthood, or emigrate, or to try to find some alternative, but the choices were very limited.

"That combination of social and economic conservatism coalesced with the newly-emergent and more powerful Church in the 20th century. It wasn't always about the Church imposing. Obviously you have the development of a very strong public confessional and devotional Catholic ethos. But the Church often looked to the conservative farmer class to reinforce that social conservatism."

One of the most revealing aspects of Occasions of Sin is how the author can only really form an identikit of Irish sexual history by focusing on criminal cases, thereby refracting the historical narrative through a lens of negativity. The over-riding impression, therefore, is that sex was always "dirty" and "shameful" in this country.

"It's definitely a challenge for the historian to try and find positive reflections on sexuality," Ferriter admits. "I don't think it's just Ireland though. I looked at a lot of other countries, and the work that's been done to date has been largely written from the point of view of what went wrong. That's more likely to be the stuff that went through the courts or was discussed in the papers. You have to dig very deep to find positive accounts of sexual experiences." "What's more, an awful lot of the language associated with sexuality is overwhelmingly negative. If you begin to trace the public announcements on sexuality, you encounter this rhetoric of 'sin' and 'shame'."

Of course, it's impossible to have any discussion on Irish sexual history without mentioning the devastating Ryan Report and similarly harrowing investigations into the physical, emotional and sexual abuse of children in State-run institutions in the first half of the 20th century.

"Probably the most important thing to come out of the Ryan Report is the vindication of those who were not believed for so long," Ferriter says. "To see the victims given an official voice is a real watershed."

"That's not just about the Church. It's about the combination of Church, State and society. The State was funding, and society was facilitating that children be incarcerated. A lot of what I look at in the book is outside of institutions. The majority of sexual abuse was not carried out by religious orders or by agents of the Church. It went on in houses, in families, in communities. Clearly we need to confront everything coming from the investigations into child abuse, but there's a danger that we will forget about the broader canvass."

So are there aspects of the Irish sexual experience that are unique just to us? "There are things common to most countries: censorship, anti-pornographic drives, access to information, moral panics," Ferriter explains.

"After societies have been through a period of upheaval, there's usually a backlash. That happened here after the War of Independence and the Civil War. It happened in the US and Britain after WWII - that clampdown on what was perceived to be sexually deviant behaviour."

"What perhaps makes the Irish case more pronounced is the sheer intensity of the Catholicism, the emphasis on outward convention, outward devotion, Mass attendance, and the idea of shame. That rhetoric around shame and stigma lasted longer and was more deeprooted in Ireland."

Other astonishing Irish sexual peculiarities were the high rates of celibacy and postponed marriages in this country. "The statistic for the 1950s was that 73 pc of men between 15-44 were unmarried; the equivalent pc in the US was 30 pc," Ferriter reveals. "That can be traced back to the after-effects of the Famine, but there has to have been something else that caused such huge discouragement towards marriage, and procreation, and the mixing of the sexes in general."

Ferriter is also at pains to stress that this story is far from over, despite, or perhaps because of, our supposed sexual freedom and enlightenment. "This isn't a story about our journey from sexual darkness to sexual liberation, where we've reached a very sane, comfortable point in our sexual history," he says. "It doesn't work that way. A lot of what we're going through now are versions of what we went through before: moral panic, parental concern about sexual behaviour, premature sexualisation, and STIs. Drink is still a huge factor; it's bound to have major consequences on sexual behaviour in this country. There's still this hugely immature language about sex and sexuality. Changing that language needs to be the focus now."

\*Occasions of Sin: Sex and Society in Modern Ireland is published by Profile Books.

Declan Cashin (MA European Studies, 2004) is a freelance journalist working in Dublin.

Professor Diarmaid Ferriter. Photograph courtesy of International Festiva of Authors

# PhD Profile - Virtual city models



**SDC** 

Tommy Hinks' image 'Digital Dublin'. During a flyover of Dublin, a dataset containing 225 million point samples was collected. Through building a recursively subdividing cuboid data-structure, large parts of the dataset can be visualized and understood. Depicted in the image is a small part of the data set covering Dame Street with surroundings. Originally submitted for UCD Images of Research competition.

Swedish PhD student Tommy Hinks moved to Dublin in 2006 and now has a more in depth knowledge of the city's streets and buildings than most natives. After studying an MSc in Computer Graphics at the University of Linköping, Sweden, Tommy embarked on a Science Foundation Ireland sponsored research project developing aerial laser scanning technology.

"I was attracted to the possibility of developing a new and fast-moving technology into something that could easily make its way into the everyday life of millions of people. Virtual city models are used in a number of applications, ranging from computer games to GPS navigation."

Companies such as Google and Microsoft, currently supply 3D map viewers, allowing users to freely browse 3D maps of the earth. At the moment a lot of the content generation for these maps is done manually, which is a slow and expensive process.

### Systems Biology Ireland — €19.5 million commitment from government and industry

Systems biology seeks to unravel the complexities of cells through the use of models that predict biological behaviours. A  $\in$  19.5 million investment in this powerful methodology, which uses the strength of computers and mathematics to understand biology, was announced by Minister for Science, Technology and Innovation, Conor Lenihan TD in September 2009.

"Today's investment establishing Systems Biology Ireland is clear evidence of the Government's ongoing commitment to further enhancing Ireland's scientific base to aid our economic recovery," said the Minister at the announcement.

The research being undertaken at Systems Biology Ireland aims to enable quicker and better treatments of a range of medical conditions, including various cancers and should allow for better therapies to be delivered more effectively to patients.

Systems Biology Ireland will underpin Ireland's extensive life science industry, including its pharmaceutical industry which employs 23,000 people and is responsible for more than 48% of the country's export sales.

The new Science Foundation Ireland-funded Centre for Science, Engineering and Technology, (SFI CSET), Systems Biology Ireland, is led by UCD and is supported by researchers in NUI Galway. The new centre is to receive €14.8 million from SFI and a further combined contribution of almost €4.7 million by Industry partners - Ark Therapeutics, Hewlett Packard, Servier, Agilent Technologies, Siemens Ireland and Protagen AG. In total, 69 highly skilled personnel will be working to deliver the Systems Biology Ireland's research programme.

The Director of the SBI research programme "Systems Biology of Signalling Networks and Stem Cells" is Professor Walter Kolch. He is joined by a multi-disciplinary team from UCD, NUI Galway and REMEDI, the Regenerative Medicine Institute based in NUI Galway.

Pictured at the launch of Systems Biology Ireland: Professor Frank Gannon, Director General of Science Foundation Ireland; Mr Conor Lenihan TD, the Minister for Science, Technology and Innovation; Professor Walter Kolch, Director, Systems Biology Ireland UCD Professor is President of Association of French Language Studies

"Our goal is to develop software that makes it

possible to collect and process data for an entire

Tommy is working on new methods for

extracting building structures from aerial laser scan data collected over Dublin with his supervisor

Dr Hamish Carr, UCD School of Computer Science

and Informatics and the Urban Modelling Group in

'Our methods have been successfully applied

to large urban scans, demonstrating the scalability

of our approach. Previous methods have not been

Beyond his PhD, Tommy has his sights set on

some challenging projects: "An interesting up-coming

project is the mapping of London prior to the 2012

Olympics, which will require huge resources in terms of technical expertise and logistics".

able to achieve robust results on a large scale, something that is absolutely necessary for

the UCD School of Architecture, Landscape, and Civil Engineering, headed by Dr Debra Laefer.

city within a single day."

automatic processing."

News

Professor Vera Regan, UCD School of Languages and Literatures, has been elected President of the Association of French Language Studies (AFLS) at the annual conference in Neuchatel, Switzerland (3-5 September, 2009).

The AFLS is a world wide organisation, with members from Europe, the United States, Canada, and Australia, amongst other areas. Its primary aim is to promote research in French Language and Linguistics. The office is a two year renewable term. Professor Regan also delivered the Keynote address at the 2009 conference in Switzerland: "Variation Patterns and Identity Construction in French L2".

# UCD physicists publish in Korean

Let There Be Light: The Story of Light from Atoms to Galaxies, by two Emeritus members of the UCD School of Physics is to be published in Korean by Seoul-based publishing house Changbum in January 2011.

Originally published by Imperial College Press, Let There Be Light, by Professor Alex Montwill and Dr Ann Breslin, is the first book of its kind to devote itself at this level to the role played by light and electromagnetic radiation in the universe.

# Preventing fungal infections in hospital

When a patient is in intensive care, one of the last things you want is a sticky fungus contaminating catheters and feeding tubes. Particularly if that fungus is capable of killing up to 40 per cent of the people whose bloodstream it infects. Claire O'Connell (BSc 1992, PhD 1998) discovers how Conway Institute investigator Professor Geraldine Butler is teasing out the genetics of *Candida parapsilosis*, in search of clues about how best to tackle the problematic fungus.

Already, her lab's work is complementing that of other leading *Candida* researchers around the world, and they are starting to identify how *Candida parapsilosis* forms hard-to-shift "biofilms" on medical devices.

Professor Butler is no stranger to the inner workings of fungi, having spent the start of her career looking at how cells grow in *Saccharomyces cerevisiae*, also known as brewer's or baker's yeast. Based in the former Biochemistry Department in Merville House (now NovaUCD), in the 1990s she examined elements of the "cell cycle" in the model organism, but sensed that Ireland lacked the facilities to keep up with the international pace of the field.

"At the time what I felt was happening - and this was with *Saccharomyces* in particular - was that the research was moving into a very high throughput mode, and it just wasn't really possible to do that in Ireland then, you would need an awful lot of money," recalls Butler, who is now associate professor of genetics at UCD. "So I decided to try and find an area that was more fundable. *Saccharomyces* was a model organism, but I was looking for something that was more health related."

That decision led her towards *Candida*, a genus of fungus that includes both harmless and diseasecausing species. They can be particularly stubborn infections to treat, because their cell structure is broadly similar to human cells, explains Professor Butler. "Any drugs to treat them will work against you as well as against them, so the drugs all have side effects," she says. "And they all have cell walls, so they are hard to treat."

One species, *Candida parapsilosis*, caught her attention, because it poses a particularly insidious hazard in clinical environments. "The problem with *Candida parapsilosis* is that it is spread. It's on the hands of most healthcare workers whereas other [disease-causing *Candida* species] are not," she explains. "The big problem is that the species grows on any indwelling medical device and with premature babies that tends to mean feeding tubes."

Once the organism gets into catheters and feeding tubes, it forms biofilms that are hard to shift. And if the fungus manages to invade the patient's bloodstream, the mortality rate can be up to 40 per cent, notes Professor Butler. "It's a particular problem in premature babies, but noone knows why," she says. "And it's known as an emerging pathogen because it is becoming more and more prevalent."

Her lab started to investigate *Candida parapsilosis* by surveying parts of its genome – working out its whole genetic sequence was not practical in 2003. And as the project developed, Butler formed links with industry through the Wellcome Trust Sanger Institute, and other collaborators, including the Fungal Genome



Initiative at MIT and Harvard. "I started presenting the work at conferences and people started to realise what was happening and it grew really fast," she recalls.

A milestone in the field was the publication earlier this year – with Butler as first author – of a paper in the prestigious journal Nature that identified important gene sequences in disease-causing *Candida* species. The study, which involved 21 institutions over around five years, compared genome sequences from six species, three of which cause human disease, and found the harmful ones were better endowed with genes for "stickiness".

"There were more copies in the pathogenic ones of gene families that are involved in adhesion and the cell wall than were in the non-pathogenic ones. So basically they have more genes that allow them to become pathogens," explains Professor Butler. "In some cases the gene families just weren't present in the non-pathogenic ones, or there might have been one, but 15 or 16 more in the pathogenic ones."

The extra "stickiness" factor in the diseasecausing *Candida* species could help explain why problematic organisms like *Candida parapsilosis* form biofilms on plastic surfaces, and why they are so invasive in humans.

"When they stick, they tend to stick both to plastic and to human cells so it's the same proteins that are involved, and we are looking at that," says Professor Butler, whose eight-strong research team at UCD is funded through Science Foundation Ireland, the Health Research Board and IRCSET.

"We are really concentrating on *Candida parapsilosis* and trying to figure out what controls

the biofilms in that species and compare it to *Candida albicans*. They are actually surprisingly different, more different than we expected. So we are trying to find out about the pathways that control the biofilm development."

Teasing out the pathways involved in controlling that stickiness in the fungus could help identify ways of breaking the chain using more effective pharmaceutical drugs, cleaning agents or anti-stick coatings for the inside of catheters to stop the fungi setting up camp.

"That's a long term goal," says Butler. "The assumption is that if you understand how they stick then you can stop them sticking. But it's never very simple. There's never just one protein for a start, there are always lots of them."

To date, Butler's group has been growing *Candida parapsilosis* on squares of the plastic from which feeding tubes and catheters are made, but they are now starting to collaborate with researchers in Wisconsin on how the fungus grows within such tubes and invades a host.

Meanwhile Butler is also trying to shed light on some mysteries about the reproductive traits of Candida species. In particular, *Candida parapsilosis* appears to be asexual, as its genetic machinery for mating seem to be degenerate.

"What has been noticed in the last few years is that pathogens, and particularly fungal pathogens, seem to suppress mating when they infect humans. So it seems to be an advantage to them not to mate," she says.

Claire O'Connell (BSc 1992, PhD 1998) is a freelance journalist.



# Mapping Death: People, boundaries and territories in Ireland 1st to 8th centuries AD



1st century AD crouched inhumation from Knowth, Co Meath. The location and condition of a skeleton frequently provide insights for historians into the circumstances surrounding the death

Great changes happened in Ireland during the first centuries AD. New peoples settled on the island and trading and military links were made with the Roman world. Christianity was introduced by missionaries such as St Patrick and the more obscure Palladius. With Christianity came Latin and literacy, expressed for the first time in Irish through the ogam alphabet. Powerful royal dynasties carved out new kingdoms. Ireland moved from the Iron Age to the medieval, Christian world.

The UCD Micheál Ó Cléirigh Institute with the Discovery Programme (a government-funded archaeology research body) has sought to detect these significant changes in Irish society through the evidence of burial practices. All burials from this period are being fully recorded and a sample number of sites are undergoing detailed archaeological, historical and scientific examinations. The project is already revealing how burial practices changed as Christianity slowly took root in the country and how Irish society and its

customs were changed by external influences. Scientific research such as isotopic analysis and osteo-archaeology is yielding facts about disease, trauma, diet and migratory patterns in early Ireland.

The results of this research and its context in a wider international framework will be explored at an international conference to be held in the Helen Roe Theatre, Royal Society of Antiquaries of Ireland, 63 Merrion Square on 27/8 November 2009.

The 'Mapping Death' project is funded by the Heritage Council's INSTAR programme. Members of the team include Dr Edel Bhreathnach, Academic Project Manager, UCD Mícheál Ó Cléirigh Institute; Dr Elizabeth O'Brien, Post-Doctoral Fellow, UCD Mícheál Ó Cléirigh Institute; Dr Elva Johnston, UCD School of History and Mr Anthony Corns, IT Manager, Discovery Programme.

For further details see www.mappingdeath.ie.

# Trí lionsa Sualannach – íomhánna de shaol na hÉireann ag tús an fichiú céad

Is díol suntasach é an páirt a ghlac scoláirí Lochlannacha in dul chun cinn an léinn Cheiltigh i ndiaidh bunú an tSaorstáit. Léiríonn taispeántas nua grianghrafadóireachta atá curtha i láthair ag Cnuasach Bhéaloideas Éireann an tionchar ar leith bhí ag ceathrar scoláirí agus scríbhneoirí Sualannacha ar ghné amháin den gcultúr, is é sin bailiú agus staidéar ar bhéaloideas agus ar chultúr ábhartha na tíre seo.

Orthu siúd bhí an béaloideasóir cáiliúil, Carl Wilhelm von Sydow, a chaith tamall in Éirinn sna 1920idí ag foghlaim na Gaeilge, agus ag cur aithne ar scoláirí Ceiltise ar nós Dhúghlas de hÍde. Sa bhliain 1927 bhuail sé le scoláire óg dar b'ainm Séamus Ó Duilearga, a raibh a shuim sa bhéaloideas á mhéadú in aghaidh an lae agus a bhí i mbun stór mór scéalta agus seanchais a bhailiú ag an am ón scéalaí Seán Ó Conaill i mBaile an

Sceilg, Co. Chiarraí. D'éirigh cairdeas mór idir an fear óg agus an scoláire aibí agus, ar chuireadh ó von Sydow, chaith an Duileargach tréimhse sé mhí i gCríoch Lochlainn an bhliain dar gcionn ag déanamh staidéir ar na modhanna léannta ba nuaaimseartha maidir le béaloideas a bhailiú, a rangú agus a chartlannú. Ar fhilleadh dó, luigh Ó Duilearga isteach ar institiúid bhéaloidis cosúil leis an Landsmål- och Folkminnessarkivet (An Chartlann Chanúintí agus Bhéaloidis) in Uppsala agus an Folklivsarkivet in Lund a chruthú in Éirinn. Ba é toradh na n-iarrachtaí seo (le tacaíocht ó von Sydow) ná gur bunaíodh Coimisiún Béaloideasa Éireann in 1935. Tá an bailiúchán béaloidis agus eitneolaíoch a d'éirigh leis an Coimisiún sin a bhailiú ar cheann de na cartlanna béaloidis is mó ar domhan, atá faoi chúram an Choláiste Ollscoile, Baile Átha Cliath i mBelfield. Tuilleadh eolais faoin gCnuasach ag www.ucd.ie/irishfolklore.

Sluáin phoblachtacha in iarthar Chorcaí (Carl Wilhelm von Sydow, 1920), sampla ón taispeántas ghrianghraf Trí lionsa Sualannach – íomhánna de shaol na hÉireann ag tús an fichiú céad (An Chartlann Grianghrafadóireachta, Barra an Teampaill, Baile Átha Cliath, 24 Meán Fómhair – 3 Deireadh Fómhair 2009).



# China first out of global financial crisis, says leading expert

China is the first major economy to start emerging from the global economic crisis, according to Dr Nicholas Lardy, Senior Fellow at the Peterson Institute for International Economics at Washington DC. This recovery is a result of the early, well-designed, and large-scale policy response to the crisis by the Chinese government.

Dr Lardy also highlighted that China avoided the proliferation of sub-prime loans and other 'so called' innovative financial products that plunged Western economies into the financial crisis. As the first large economy to converge back toward its long term potential growth path, Dr Lardy considers that China is in a position to 'soon' overtake Japan as the world's second largest economy.

Dr Lardy gave the keynote address at the Inaugural Chinese Economic Association (Europe) Conference at UCD in July 2009. The international conference, "*China and the Changing Landscape of the World Economy*" was organised and hosted by the Confucius Institute for Ireland and the Irish Institute for Chinese Studies at UCD and was attended by some 130 scholars from 71 different universities around the world.

Ireland is one of many economies currently expanding its links with China. Dr Liming Wang, Director of the Irish Institute for Chinese Studies at UCD noted that, "We are committed to working with the Irish government, businesses and academia to develop stronger educational, cultural and commercial links between China and Ireland."

#### International Summer School marks 125 years of the GAA

This year's UCD International Summer School (the sixty first) ran from 11th to 19th July. To mark 125 years of the GAA, the School took as its theme *"Sporting Society: The social, cultural and political role of the Gaelic Athletic Association."* The school was attended by a diverse group that included participants from Italy, Hungary, Czech Republic and Russia.

The programme focused on the central social, political and cultural role played by the GAA in moulding contemporary Ireland, Irish society and its contribution to the social cohesion of the Irish diaspora around the world. Topics covered included the relationship between the GAA, politics and the foundation and evolution of the state, the GAA and the print media, representations of the GAA in film and photography, sporting sites, the GAA and the wider world and its evolving role in contemporary Ireland.

The programme was delivered in the form of lectures, film, discussion seminars, site visits and with some football and hurling along the way. Participating speakers included Paul Rouse, Mike Cronin of Boston College, Sean Crosson of NUIG, Mark Duncan, Roisin Higgins, Regina Fitzpatrick, Arlene Crampsie, William Murphy, Donal MacAnallen.

### Stories and Images from the North Inner City's Communities

The stories of Dublin's North Inner city residents were brought to life through multimedia exhibition jointly led by UCD academics in September 2009.

The Monto Heritage Project: Stories and Images from the North Inner City's Diverse Communities is part of the Placing Voices, Voicing Places project funded by the Heritage Council to explore the meanings of heritage in a culturally diverse Ireland.

The exhibition featured stories and images reflecting the lives and memories of seniors, youths and migrants in the area of Dublin known as 'the Monto'.

It drew from oral history sessions with the seniors from the Lourdes Day Care Centre; a photo project with young people in the North Centre City Community Action Project; Heritage sessions at the Dublin Multicultural Resource Centre; photography work and local tours provided by the Folklore Project; and digital stories created and produced by residents of the area in a 12week workshop.

Lord Mayor of Dublin Emer Costello, along with Minister for Integration, John Curran attended opening of the exhibition.

The project was jointly led by Pat Cooke (UCD School of Art History and Cultural Policy), Dr Alice



Feldman (UCD School of Sociology and Co-Director of the UCD Migration and Citizenship Research Initiative) and Professor Tadhg O'Keefe (UCD School of Archaeology) along with Cormac O'Donnell, Dublin City Council Office for Integration, and Sarah Tuck, Director of CREATE, the national agency for the collaborative arts. It brought together a team of artists and community activists to collaborate with local residents in exploring their sense of heritage as part of their daily lives.

Dr Alice Feldman was one of the leaders of the participatory research activities, and is visiting the School of Humanities at the University of Brighton as a Marie Cure Transfer of Knowledge Fellow, funded by the Egalitarian World Initiative at UCD. Through the fellowship, she will be advancing her interdisciplinary work on the evolving notions of 'identity' and 'heritage' in the contexts of everyday Irish social and civic life.

Fellow sociologist Dr Andreas Hess was awarded a 2009 UCD President's Fellowship and is currently Research Fellow at the Center for Cultural Sociology at Yale University. The Centre, directed by Professor Jeffrey C. Alexander and Professor Ron Eyerman, is one of the most prestigious addresses in American sociology.

# Archaeology and history in Youghal

The Irish Historic Towns Atlas, a project of the Royal Irish Academy, has published fascicles on eighteen Irish towns over the past twenty years. Research for an atlas of Youghal, Co. Cork, one of Ireland's premier historical towns, is currently being conducted under the direction of Professor Tadhg O'Keeffe of UCD School of Archaeology.

This important project, which will make very detailed information on the town's topographical development and built-heritage available to historians and planners and other interested parties for the first time, is being funded in part by generous support from members of the town community.

Youghal is long-overdue a comprehensive modern study. The walled town was founded by Maurice FitzGerald after 1215, allegedly on a site previously occupied by Vikings, and was settled by citizens of Bristol. During the middle ages it was one of the main Irish ports for merchants from south-west England, France and Iberia. In the Munster Plantation it was home to Sir Walter Raleigh, and according to local tradition potatoes were first grown in Ireland in the garden of Myrtle Grove, his house in the town. Youghal's prosperity in the nineteenth century, when it became a resort, is evident in some very fine Victorian houses.

The final publication, expected to be ready in 2010, will feature a long essay on the topographical history of the town based on original research, as well as a range of pull-out maps of the town, ranging from Plantation-era maps to early Ordnance Survey maps.

Youghal's famous Clock Tower, built 1777 on the site of a medieval gate, was a gaol and site of public execution in the nineteenth century.



Images from the Monto Heritage Project exhibition reflecting the lives and memories of seniors, youths and migrants in the North Inner City

#### How do we create 'learning societies' and institutions that maximise the transfer of knowledge?

Nobel Prize winning economist Joseph Stiglitz, says that is the main question researchers in international development need to address. Stiglitz posed the question to 25 international graduate students from Yale, MIT, Princeton, Cornell, LSE and beyond, who attended a workshop this summer at the Brooks World Poverty Institute at the University of Manchester.

Michelle D'Arcy, UCD School of Politics and International Relations, was among the group. Over three weeks of intense lectures by leading academics and policy makers such as Ha-Joon Chang, Jomo Kwame Sundaram and Jose Antonio Ocampo on a range of issues from the global economic crisis to the future of Africa, students debated the main challenges for development and presented their research. D'Arcy's paper '*Why do citizens assent to pay tax?*' used tax as a lens to ask questions about state legitimacy in Africa.



The Adelaide Hospital

School of Nursing



### EU appoints UCD School of Social Justice and ICCL to monitor racism in Ireland

The European Union's Fundamental Rights Agency (FRA) has appointed the Irish Council for Civil Liberties (ICCL) and UCD School of Social Justice as the FRA's new RAXEN National Focal Point on racism, xenophobia, islamophobia and anti-Semitism in Ireland.

The ICCL/UCD consortium will be assisted by a panel of the country's top academic experts from around Ireland, as well as by the Immigrant Council of Ireland (ICI), which has been subcontracted to develop the communications work of the RAXEN National Focal Point.

RAXEN National Focal Points are the FRA's recognised national coordinators, contracted to manage an information network including government departments, research bodies, statutory human rights and equality bodies, NGOs and social partners. Based on information gathered through this network, the ICCL/UCD consortium will provide regular reports to the FRA on racism and related forms of intolerance in Ireland.

Professor Kathleen Lynch, Chair of Equality Studies at the UCD School of Social Justice welcomed the appointment.

### International Young Chemist of the Year

Dr Emilie Banide, a recent PhD graduate from UCD, was presented with her *International Young Chemist of the Year* Award by the President of the International Union of Pure and Applied Chemistry, Professor Jung-II Jin, at their bi-annual Congress in August. The Congress was attended by more than 1,000 chemists from more than 60 countries.

Dr Banide received one of five awards for the best chemistry PhD theses of the year 2008, selected by a committee of internationally distinguished scientists. She is the first ever winner from the Republic of Ireland; the other four recipients of the award in 2008 came from Osaka University, Oxford University, Cornell University and the University of California at Berkeley. Dr Banide also received the Irish Times/Royal Irish Academy Prize for her doctoral work.

Dr Banide, who now works with multinational pharmaceutical company Novartis, received her undergraduate training in Paris and Lyon, and then joined the research group of Professor Michael McGlinchey in the UCD School of Chemistry and Chemical Biology, where she carried out research on new luminescent materials with potential for use in the next generation of digital displays.

#### New book commemorates Ireland's first nurse training school

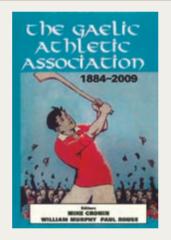
Established in 1859 as a training school for young Protestant women, the Adelaide Hospital School of Nursing was the first nurse training school for lay women in Ireland. The School was an integral part of an institution originally founded to give 'medical attendance and also pastoral support ... to Protestants in reduced circumstances' and the Hospital's 'peculiar religious character' provided a focus for participation in healthcare by Ireland's Protestant community.

For one hundred and fifty years, the Adelaide Hospital School of Nursing trained nurses who provided 'assiduous and intelligent' nursing to the people of Ireland and the Adelaide Hospital's successful development as a modern teaching hospital was in great part attributable to the quality of the nursing care proffered by its nurses.

To mark the 150th anniversary of the School's founding, the Adelaide Hospital Society commissioned nursing historian Professor Gerard Fealy, Director, UCD Irish Centre for Nursing & Midwifery History, to write a commemorative history of the School. With a foreword by the noted historian and academic Dr Fergus O'Ferrall, the book provides a detailed social

history of the Adelaide Hospital and its nursing school and is the first comprehensive history of an Irish hospital nursing school. The book relates important milestones in the history of the Adelaide, including the role that it played in the early development of modern nursing in Ireland and the contribution of Adelaide nurses to the two world wars, and the book also contains short biographical studies of many of the hospital's former matrons.

### Colm Toibín launches major book on the GAA



UCD historians feature in a book on the Gaelic Athletic Association (GAA) launched in June by the writer, Colm Toibín.

In a wide-ranging speech which analysed the history of the GAA, Toibín noted that the rhetoric of idealism which surrounded the Association was crucial to its development.

"The idealism of the GAA has somehow mattered, as much as the speed of the games and the skill of the players. This book is a testament to the beauty of that idealism and its mystery. The idealism somehow has mattered to the spirit of the games, to the spirit of a crowd at a match, even if it blissfully soars above them or gets trampled on. Or can be laughed at now and taken asunder word for word."

The new book entitled: The Gaelic Athletic Association, 1884-2009 (Irish Academic Press 2009) sees a group of leading Irish and international historians assess the importance of the GAA in Irish society since it was founded in 1884.

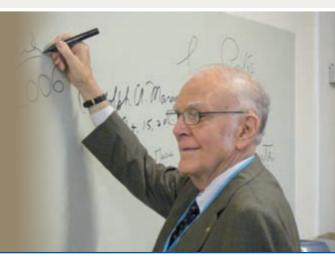
Over the years, much has been written and recorded about the sporting aspects of the GAA (Gaelic Athletic Association) including the great names and the famous players, but relatively little has focused on the role of the GAA in wider Irish society.

The book offers some original insights into the 'class' make up of the GAA, the centrality of amateurism in the Association, and the way Gaelic Games has been represented in popular media.

"Every chapter in the book is built around ground-breaking research. What we have tried to do is to take an entirely fresh look at the place of the GAA in Irish life. Some people will disagree with the conclusions that the various authors have drawn, but it wouldn't be a real GAA project if there wasn't some measure of disagreement or controversy," says Dr Paul Rouse from the UCD School of History and Archives, one of the co-editors of the book (with Mike Cronin and William Murphy).

Contributors to the book include: Diarmaid Ferriter, A.B. Gleason, Eoin Kinsella, Richard Holt, Paul Rouse, William Murphy, David Hassan, Mark Duncan, Sean Crosson, Brian Ó Conchubhair, Dónal McAnallen, Tom Hunt, Paul Darby, Mike Cronin, and Gearóid Ó Tuathaigh.

Professor F Sherwood Rowland delivered the 2008/9 Wheeler Lecture at the UCD School of Chemistry and Chemical Biology on the topic of "Stratospheric Ozone Depletion and Global Climate Change". Professor Rowland shared the 1995 Nobel Prize for Chemistry with Professors Paul Crutzen and Mario Molina for their work on ozone depletion by anthropogenic emissions. Professor Rowland is the eighth Nobel Laureate to deliver the Wheeler lecture, which commemorates the contribution made by Professor Thomas Sherlock Wheeler, Chair of Chemistry at UCD (1945-1962). He is shown here continuing a 40-year-long tradition, signing the wall of the School of Chemistry and Chemical Biology common room.



# **Ulysses and everyone**

Journalist and literary critic Fintan O'Toole wrote that readers approach Joyce's *Ulysses* with "an air of reverence, a sense of obligation, that parallels the approach of tourists to a must-see cathedral." Many don't get past the font. Professor Declan Kiberd, in his thirty years teaching 'Ulysses' in University College Dublin, has encountered many deferential Joycean tourists; mostly friends and relatives of students who have shyly requested to attend his lectures in the hope of getting a glimpse inside the cathedral doors.

When Kiberd published 'Ulysses and Us: The Art of Everyday Living' (Faber and Faber) in July, he hoped that it might serve as a literary tour guide for the ordinary reader. Not a guide that would lead readers into the church of Joyce that has been erected by scholarship, but back out onto the streets of Dublin and into the real world where, Kiberd insists, Joyce belongs.

So how successful has the venture been? Early reviews in The Observer, The Guardian and The Irish Times were notable not just for their praise, but also for their authorship, says Kiberd. "I was delighted to note that many of the reviews were carried out by novelists or critics rather than scholars," says Kiberd. "This suggested to me that the book was being categorised as a work for general readership – they didn't unleash the professional Joyceans on me."

The critics have warmed to Kiberd's mission. Dublin novelist Claire Kilroy wrote of " a beautiful, joyful book about a beautiful, joyful book... Kiberd is guiding his reader through the challenges presented by Ulysses with the same wisdom and kindness Bloom engaged to guide Stephen through the challenges of his long day and night all those years ago."

Blake Morrison in The Guardian praised Kiberd's route through the "wisdom narrative" of Joyce while Sean O'Hagan in The Observer described the book as an "inspired reclamation of Joyce's great epic of the everyday."

Kiberd tells us that Ulysses is "a book which set out to celebrate the common man and woman but has endured the sad fate of never being read by many of them." The success of 'Ulysses and Us' will be measured, not least by Kiberd himself, by the number of common readers it brings through the novel. In the four months since its publication, who apart from critics and scholars has taken the tour?

"I got more letters about this book than any other," says Kiberd, author of several hugely popular and critically acclaimed books including 'Inventing Ireland: The Literature of the Modern Nation'.

"Through this work I have discovered devotion to Joyce among all sorts of communities for a range of different reasons."

He speaks of Peter Carmichael in Cornwall, an octogenarian injured in World War II, who picked up 'Ulysses' in the aftermath of service. "He survived, and decided to devote his bonus years to animals and 'Ulysses'. He, like many others, regards it as a civilisational text."

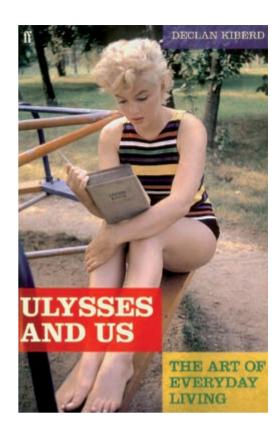
Peter Carmichael's attitude to 'Ulysses' complements Kiberd's own.

'Ulysses and Us' presents the novel as a practical guide to living from which the everyday reader can benefit. Kiberd's book describes each chapter in terms of what the reader can learn about a range of life skills from eating to thinking.

This approach, which sidesteps Joyce's original Homerian schema, has proved a more approachable framework for many readers who have contacted Kiberd since July.

"I've had a lot of communication from lawyers and doctors, professionals who I believe may have been channeled into a career that didn't allow them to express a deep level of literacy that 'Ulysses can satisfy," Kiberd posits.

> Kiberd loves the idea that his book ended up in the hands of Jack Kyle, former Irish rugby international, when he was conferred in



UCD this year and handed a copy of the book with his honorary degree.

He also enjoyed reading a review of the work in the Welsh edition of the Big Issue. "There is much in my book about the wisdom of the streets displayed by Joyce in 'Ulysses'. Who knows more about that then those who live on the streets?"

However, there is a vast community of 'ordinary' readers that remain beyond Kiberd's reach. As the "last technophobe in the UCD School of English, Drama & Film" he knows only by reputation the likes of the London nurse whose 'Ulysses' blog has generated a massive virtual reading group and brought significant numbers of readers to Kiberd's work. The ordinary reader he's chasing is out there, in the public space of the internet.

Kiberd is certain Joyce would be among them if he wrote the book today. "If Joyce was writing Ulysses now he would probably publish it on CD Rom, with interactive maps and songs – he would have been besotted with the multimedia possibilities," says Kiberd. "In fact I've no doubt there's a race to produce the online interactive 'Ulysses' between scholars somewhere."

One Joyce reader who has been profoundly affected by Kiberd's book is Kiberd himself. "I studied Joyce through the era of critical theory, when academics were trained to interrogate texts through the prisms of feminism, post colonialism, psychoanalysis. We were looking for hidden meanings, unmasking hidden agendas. It would have been regarded as too innocent to look for the wisdom of a book, to examine what it has to teach us about the art of everyday living for ordinary people.

Writing this book has allowed me to think about what 'Ulysses' has to teach us, as one of the great texts of our civilisation, like Homer, Dante or the Bible."

Louise Holden (MEd 2008), is a journalist with the Irish Times.



### Arctic climate change expedition

Dr Claire Belcher and Mr Luke Mander recently returned to the UCD School of Biology and Environmental Science from their visit to the Arctic Circle to collect samples from 200 million year old rocks in East Greenland.

This time in Earth history is believed to have experienced a 4 fold rise in atmospheric carbon dioxide, leading to a 4°C rise in global temperatures. This makes the study of this ancient global warming event important in the context of current climate change predictions. The rocks in East Greenland contain abundant and beautifully preserved plant fossils that have enabled Principal Investigator Dr Jennifer McElwain to reconstruct the vegetation of the time.

Belcher and Mander (along with McElwain's EU Marie Curie funded team) hope to study the effects of climate change on this ancient plant ecosystem to allow them to better understand how global warming might affect Earth's biodiversity in the future.



#### Mathematics Support Centre expansion

The UCD Mathematics Support (MSC) has doubled in capacity and has improved wheel-chair access for the 2009/10 academic year.

The Centre provides vital mathematics support for students of all mathematical abilities, on a one-to-one basis, in a friendly, relaxed and informal atmosphere. Staff at the Centre, which is managed by Nuala Curley, aim to enable students who are experiencing particular difficulties in mathematics to overcome their fear of the subject, take control of their own learning and build confidence in their own mathematical ability.

In 2008/9, the Centre received 2,300 visits from students of 55 programmes across UCD from Arts, Agriculture and Commerce through to Engineering, Medicine and Statistics.

This was an increase of 160% on 2007/8 levels, with the Centre providing tailored support in mathematics to students of all levels, from Access to PhD. The Centre also assists New Era, Mature students and students with disabilities.



Forty undergraduate and over 150 postgraduate jobseekers began study at UCD in September 2009 as part of the government's Labour Market Activisation Schemes.

The free undergraduate places were made available on the UCD Bachelor of Business Studies (distance learning programme) as part of the plan to help improve the workplace skills of the unemployed and assist them with returning to work. The places were co-funded by the Department of Education and Science and the Department of Enterprise, Trade and Employment.

Jobseekers with a primary degree were eligible to apply for funded places on five Graduate Certificate courses in entrepreneurship, information technology, sustainable agriculture, green technologies, or nanobio science, which were funded by the HEA.



21 titles were published by UCD Press in this academic year, in areas from Sociology to History to Literary Studies. UCD Press, in existence for 14 years under the management of the Executive Editor, Barbara Mennell, has a list of 174 titles, with specialisms in social policy and sociology. It is also the home of the long-standing and popular series, Classics of Irish History, with 41 titles now in print



Joanna Thornton, 3<sup>rd</sup> year UCD Equine student was named a European Alltech Young Scientist undergraduate winner earlier this year, for her work on 'Alternatives to antibiotic growth promotants'. Four undergraduate students and four graduate students were chosen from 2,000 entrants to receive a \$1,000 cash prize and a trip to the 25<sup>th</sup> Alltech International Animal Health and Nutrition Symposium in Kentucky, USA. Joanna is shown here with Dr. Richard Murphy, Alltech at the Alltech European Bioscience Research Centre, Dunboyne, Ireland

### **Characters in Conversation**

In the first in the new series for UCD Alumni, *Characters in Conversation*, RTÉ presenter Dave Fanning (BA '75) posed the questions to playwright Conor McPherson (BA '91, MA '94). In an open and frank conversation, McPherson talked about the facets of his life that influenced his writing, from his times in UCD Dramsoc to life as an immigrant in London in the 1990s.

His latest play, a stage version of Daphne du Maurier's short story *The Birds*, opens at The Gate theatre in September, as part of the Dublin Theatre Festival.

McPherson is considered one the leading Irish contemporary Irish playwrights; with his many plays attracting excellent reviews, including *The Weir, Shining City and The Seafarer*. The film of his first screenplay, *I Went Down*, was met with great commercial and critical acclaim. His first feature film as a director, *Saltwater*, won the CICAE award for Best Film at the Berlin Film Festival. His second feature film was *The Actors*, which he wrote and directed. He is the director and co-writer of *The Eclipse*, a film which had its world premiere at the 2009 Tribeca Film Festival.

Since 1975, Dave Fanning has presented a wide range of music programmes on 2FM, RTÉ

Radio 1 and Virgin Radio. He has also fronted and consulted on over twenty music, movie and documentary programmes on RTÉ, ITV and Channel 4. Between '83 and '93 Fanning was rock correspondent for The Irish Times and has written articles for many publications at home and abroad. He was movie critic for The Sunday World from '97 to '04. Fanning takes on a new role in autumn 2009, presenting an entertainment and music show on RTÉ 2FM, daily at 7pm.

Visit *www.ucd.ie/alumni* to watch a recording of their Conversation and find out details of future events.



# **Hidden Treasures of UCD**

# UCD Ephemera Collection

UCD Ephemera Collection is now available to view in Special Collections at the UCD James Joyce Library. The collection was digitised by the Irish Virtual Research Library and Archive (IVRLA), a major humanities digitisation project launched in UCD in January 2005. The IVRLA aims to preserve elements from the repositories in UCD, and to increase access to this material by making it available online.

The original collection consists of a unique and varied selection of ephemera relating to the history and development of UCD and its antecedent institutions. Online access to the collection is through the IVRLA Repository, (http://ivrla.ucd.ie) There are two items of particular note from within the collection. The first item (number 24) is the programme for the Cardinal Newman Centenary Celebration Concerts, which took place at the Theatre Royal, Dublin in October 1952. The programme includes an orchestral concert by the Halle Orchestra from Manchester and a concert by Our Lady's Choral Singers who were to sing Newman's Dream of Gerontius.

The second item (number 53) consists of the text of the introductory address delivered by the President of UCD, Michael Tierney at the conferring of the Degree of Doctor of Laws Honoris Causa on John Fitzgerald Kennedy, President of the United States of America, in June 1963.



# Surviving History: Portraits from Vilna

UCD Humanities Institute recently hosted the exhibition *Surviving History: Portraits from Vilna*. This series of compelling photographs and a video documentary which presents the life stories of ten individuals who survived the Holocaust in Lithuania, where ninety-five percent of the 240,000-strong pre-war Jewish population was annihilated.

The event which was organised by the HII in association with Living Imprint and the Holocaust Educational Trust of Ireland (HETI) also featured talks by renowned Lithuanian historian and holocaust expert Ruta Puisyte, and UCD historian, Dr Robert Gerwarth as well as Bergen-Belsen concentration camp survivor Tomi Reichental. Mr Reichental was arrested by the Nazis in 1944 and sent to Bergen-Belsen concentration camp. He was 9 years old. By the time the Allied forces liberated the death camp in 1945, about 50,000 Jewish prisoners had perished there at the hands of the Nazis. Tomi Reichental survived.

The video documentary produced by Living IMPRINT follows Shivaun Woolfson's research journey to Vilnius as she interacts with the narrators, visit the cemeteries and mass graves, the archives and synagogues and listens to people's stories and memories.

The photographs, taken by Frances Tay the co-founder of Living Imprint, are a series of very moving portraits of the survivors and the places that hold their memories of this indelible period in history. They beautifully capture Shivaun Woolfson's passage through Vilnius on this very personal journey. Shivaun herself is a Jew of Lithuanian origin, whose family moved to Ireland at the end of the nineteenth century. The event was launched by the Lithuanian ambassador to Ireland, Izolda Brickovskiene and was attended by ambassadors from Poland, Bulgaria, Sweden and Latvia as well as diplomats from the Israeli and German embassies.

For further information on Surviving History: Portraits from Vilna please visit www.livingimprint.org

#### Books in early modern London and Dublin

The National Library of Ireland and the UCD Humanities Institute jointly hosted a unique master class on book history recently for doctoral students at universities in Ireland. The session was directed by Giles Mandelbrote, Curator of British Collections 1501-1800, at the British Library. Mr Mandelbrote also teaches for the History of the Book MA at the Institute of English Studies, London University. His research centres on the history of the book trade in early modern London and on book ownership and collecting in early modern England. Mr Mandelbrote's innovative class focused in particular on the intellectual history of publishing in the sixteenth and seventeenth centuries, the impact of the reformation on publishing, early book trade catalogues, Bodleian Library printed catalogues, term catalogues, Bibles and Common Prayer Books (in a range of formats/imprints), devotional books (including Catholic books printed in English on the continent), Protestant books printed in Dublin and Protestant books in Irish. The impact of the event was greatly enhanced by Mr Mandelbrote's deep expertise and the availability of books for study/discussion from the collection of the National Library. The master class was interactive in configuration and allowed for a high degree of debate and discussion among students and scholars. The event was funded through the Department of Taoiseach and IRCHSS project grant in theology and religious studies awarded to Dr Marc Caball in 2008.

# John Henry Newman's Australian relative attends special lecture

Professor John Langford is the great-grandson of Grace Langford, the niece of John Henry Newman. Grace Langford, born Mozley, was the last person to visit Newman before his death on 11 August 1890. In Summer 2009 Professor Langford, former director of the Melbourne Water Research Centre (MWRC), attended a special lecture at Newman College at the University of Melbourne by Dr Padraic Conway, Director of the UCD International Centre for Newman Studies and UCD Vice-President for University Relations. The lecture was on John Henry Newman's Dublin Diary, which Newman kept continuously from November 1853 to March 1856, and which was first published in its entirety in *Vol XXXII of the Letters and Diaries of John Henry Newman* in October 2008.



### Life Sciences innovator receives NovaUCD 2009 Innovation Award

The founder and CEO of two life sciences companies, Nicola Mitchell has been presented with the NovaUCD 2009 Innovation Award.

Together her companies employ over 40 people, mostly scientists and operate from three facilities; two certified laboratories in Blackrock and NovaUCD, and an office in London. This year, their combined annual turnover is expected to reach  $\leq$ 4 million, 95% of which is derived from export sales. The companies have well established links with key industrial players such as Amgen, Mitsui, FMC, Bayer, GSK and Pfizer.

With a business idea that integrated product development with regulatory affairs, Nicola established Life Scientific in 1995 to enable clients in the agrochemical industry get their products to market more quickly. The company has evolved to a point where end-to-end plant protection product development can be carried out from initial concept to commercialisation. In 2006, she established her second company, BioScientific Diagnostics to provide expertise in the development, validation and utilisation of immuno and cell-based methods for investigation of biopharmaceuticals and biomarkers.

Having evolved from contract product development, Life Scientific is now producing its own products. Following Enterprise Ireland's investment in the company's first in-house R&D programme, Life Scientific currently holds its own product licenses in the UK, Germany, Denmark and Ireland, and Imidasect 5GR, its niche horticultural product, is the UK market leader.

Through the re-investment of retained income, and with further support from Enterprise Ireland, Life Scientific is expanding its R&D activities and will have a further three products ready for the European market by the end of 2009. Revenue from current business activities, excluding projected revenue from Life Scientific's own products, is forecast to reach  $\in$  11 million by 2013.



Nicola Mitchell, co-founder of Life Scientific and BioScientific Diagnostics, recipient of the NovaUCD 2009 Innovation Award

### Socowave breakthrough

Socowave an Irish technology start-up headquartered at NovaUCD has made a wireless technical breakthrough which is attracting the attention of global wireless infrastructure vendors. This breakthrough has the potential to transform how cellular network operators deliver video-rich services to mobile customers, in the future.

Socowave's pioneering active panel antenna (APA) technology will enable faster internet access for cellular users. In addition, this new technology will significantly reduce the wireless industry's carbon footprint by enabling future networks to be designed with fewer base station sites. This will reduce base station electricity consumption by up to 50%. Socowave estimates that the new APA technology has an annual market potential of over  $\in$ 2 billion.

Socowave's technology dramatically improves the quality of the wireless link between mobile user and cellular network and increases effective data rates by up to ten times. This improvement will reduce video upload and download times to/ from the internet.

The technology underlying Socowave's breakthrough is based upon a pioneering base station system architecture controlled digitally over fibre optic cable which incorporates some enabling technology licensed from University College Dublin and NUI Maynooth. Socowave is supported by Enterprise Ireland and its technical design centre is located at the National Software Centre, Cork.



Joe Moore, founder & CEO, Socowave

### **HeyStaks win SUSSED! competition**

HeyStaks, a social web search company, was the overall winner of SUSSED!, UCD's €10K Entrepreneurship Competition, which aimed to transform the business ideas emerging from students and early-stage researchers at UCD into business plans and commercial enterprises.

HeyStaks (www.heystaks.com) is developing a suite of online tools to make it easier for internet users to organise and share their internet search experiences without having to leave their favourite search engine. HeyStaks' co-founders are Dr Maurice Coyle and Dr Peter Briggs, early-stage researchers in UCD's School of Computer Science and Informatics and postdocs in CLARITY, The Centre for Sensor Web Technologies. HeyStaks' other co-founder is Professor Barry Smyth.

Two other teams, XIT and OlympOzone, received runner-up prizes of  $\in$  3,000 and  $\in$  2,000 respectively in addition to 6-months free incubation space in NovaUCD.

XIT is developing a web-based travel planning application that allows users to more easily plan and share their travel experiences. XIT's application sources information from multiple websites and social networks and can make recommendations inspired by previous trips made by friends and colleagues. The software creates a portable itinerary that can be used in hardcopy or on a mobile handset. XIT's software also allows users to share their experiences after their trip or holiday.

Kevin O'Shaughnessy, XIT's team leader is a postgraduate student in UCD's National Institute of Technology Management as are the other three team members.

OlympOzone's business idea is to provide a viable alternative for the use of chlorine in swimming pools in Ireland. OlympOzone aims to be the primary supplier and installer of Ozone water treatment systems in Ireland. The use of Ozone technologies to disinfect and treat



Pictured are (l-r): Sinéad Quinn, Liam Cody and Gavin Duffy, co-founders, OlympOzone. The company, which was one of the Sussed! winners, is working on a viable alternative for the use of chlorine in swimming pools in Ireland

swimming pools does not have any of the negative health side-effects associated with chlorine byproducts. It is also more cost efficient and more environmentally friendly than using chlorine.

Sinéad Quinn, OlympOzone's team leader is a former competitive swimmer. She is also a lifeguard and swimming instructor and an undergraduate Cell and Molecular Biology student in UCD's School of Biology and Environmental Science. OlympOzone's other team members are fellow UCD undergraduate students Gavin Duffy and Liam Cody who are studying Biochemistry and Botany respectively.

# In the sleep monitoring business

Waking refreshed from a good night's sleep is one of the best feelings in the world but it's not something everyone enjoys. Sleep disorders are common and sleep disordered breathing is estimated to affect over 60 million people in Europe and the US. Serious sleep disorders, such as apnoea (pauses in breathing while asleep) can have far reaching health implications. Olive Keogh (MA 1984) learns how UCD spin-out company BiancaMed can help.

The Irish medical technology company is at the leading edge in the development of SleepMinder, a pioneering device that provides a convenient and accurate method of measuring sleep and breathing. The contactless (no wires) device is applicable in both clinical and home use settings.

"Despite spending nearly one-third of our lives asleep, the role of sleep and sleep disorders in overall health is still relatively unknown," says company co-founder and CEO Dr Conor Hanley. "Sleep is increasingly recognised as a major component of health and wellness, alongside diet and exercise. We expect the market for sleep monitoring products to grow strongly in the coming years and BiancaMed is very well positioned to benefit from this growth." The value of the global sleep market is currently estimated at around \$20 billion.

BiancaMed was founded in 2003 as a spin-off from research undertaken in the UCD School of Electrical, Electronic & Mechanical Engineering. The company employs 20 and is based at the NovaUCD, the innovation and technology transfer centre on the Belfield campus. It also has an office in Sunnyvale, California. The US represents around 50% of the world market for sleep apnoea devices.

BiancaMed's CEO, Dr Conor Hanley, is an engineer by profession with 12 years' experience of technology commercialisation. His co-founders are Dr. Philip de Chazal, an expert in ground-breaking biomedical software solutions and Professor Conor Heneghan, a pioneer in the field of transferring health technology from the hospital to the home. Professor Heneghan is currently on leave of absence from UCD and says the university has been very supportive of the drive to commercialise BiancaMed's sleep technology.

"Colleagues at the UCD School of Electrical, Electronic and Mechanical Engineering all have to work a little bit harder in my absence, but the school leadership recognises that successful commercialisation of technology is part of what an engineering school is about and have made the necessary adjustments to try and support it," he says.

SleepMinde

Biancalled

Making the jump from high quality research to commercialisation can be difficult and expensive but the calibre and potential of BiancaMed's technology has attracted both international interest and investment. As a result SleepMinder has come to market relatively fast.

At the core of its proprietary technology is a sensitive radio frequency motion sensor that can detect respiration and movement without being connected to the body. The sensor incorporates sophisticated biometric software that converts the motion data into a measurement of sleep.

In July the company announced a new funding package of  $\in$  6m that will allow it to take a major step forward. This second round funding was led by pan-European venture capital firm Seventure Partners. This is the first time that Seventure has invested outside continental Europe.

"With this new financing we will be able to accelerate the commercial development of our proprietary non contact sleep monitoring technology," says Hanley. "We are working with several major corporations to launch a range of consumer products in 2010 and the funding will help us fast track this and to continue our R&D in areas such as disease management."

Many of those with sleep disorders are unaware they have the condition and as a result around 85% of sufferers are currently undiagnosed. Sleep disordered breathing (SDB) is a cardiorespiratory disorder with long term health implications such as the increased likelihood of developing hypertension, heart failure and coronary arterial disease.

Up to now diagnosing the condition has been expensive and complicated involving time spent in a sleep laboratory. The BiancaMed technology works in a normal hospital or domestic setting. "Looking to the future there is going to be greater connectivity between the home and the hospital and remote monitoring will play a key and increasing role in this," Hanley says.

In addition to monitoring sleep in adults BiancaMed's technology can be used with infants. Next year will see the commercial launch of Bianca Baby which uses a motion sensor to monitor a baby's sound, movement and sleep.

BiancaMed plans to develop its business in a number of ways including strategic partnerships. "Partnering is a highly effective strategy if your technology is part of a larger solution," says Professor Heneghan. "BiancaMed's first product was a software analysis package for screening for sleep apnoea from ECG (cardiograms). By partnering with one of the world's largest diagnostic cardiology companies (Spacelabs) we were able to get a product FDA (Federal Drugs Administration) approved and to market as part of an integrated diagnostic cardiology. Some of our forthcoming products are more stand-alone (e.g. a home monitoring device for measurement of sleep duration), in which case it may make sense for us to assume the complete product development and to partner only for sales and distribution reasons."

Olive Keogh (MA 1984) is a freelance business journalist.

#### Your Mobile Health

Over a very short space of time the increased functionality of mobile phones has revolutionised people's lives. But BiancaMed has plans to take this a step further by turning the mobile phone into a personal health monitor.

The "Health Phone" will use a sensor to measure heart rate and breathing in a noncontact fashion and will either be integrated into the mobile phone handset or developed as a separate add-on which fits onto the phone. A user will be be able to monitor their fitness, activity levels, sleep and cardiac function and the company expects it to appeal to current consumers of fitness products such as heartrate monitors and pedometers. It will also be of interest to athletes, insomniacs and to those who want to manage their weight.

Dr Philip de Chazal, chief technical officer of BiancaMed says, "Our vision is to provide a convenient solution for people to be proactive about their health as a normal part of their daily lives, using modern technology. Our product will complement and expand the existing markets for diet and fitness and will allow for the first time a convenient method of monitoring your own personal sleep patterns at home. It will provide early detection of changes in health."

BiancaMed co-founder Conor Hanley



### **Investment in Smart Economy Research**

Nine UCD Principal Investigators specialising in bio/pharma and ICT have received funding for projects which are specifically geared towards supporting the next phase of Ireland's economic development. Conor Lenihan T.D., Minister for Science, Technology and Innovation announced funding awards of  $\in$  20.7 million to the higher education sector, of which  $\in$  8.8 million went to UCD principal investigators.

Ireland is a key global location for the bio/pharma sector. Currently thirteen of the top fifteen bio/pharma companies in the world have substantial operations in Ireland. In total, there are eighty-three facilities employing more than 17,000 people in Ireland. Six of the UCD projects link to the bio/pharma sector by undertaking research which improves understanding of diseases with the specific purpose of developing better therapies for human and animal patients.

The ICT sector in Ireland comprises of over 220 companies, employs nearly 40,000 people and accounts for  $\in$  50 billion in exports. The research funded is of direct relevance to not just the ICT sector in Ireland but globally. The two other UCD researchers awarded SFI principal investigator funds are working in the crucial areas of energy management and global computer networks.

#### Professor Dominic Walsh, UCD Conway Institute

*Title:* Therapeutic targeting of amyloid beta-protein oligomers

**Synopsis:** Alzheimer's disease is caused by plaque build up in the brain. These plaques are primarily composed of amyloid b protein. Prof. Walsh and his team aim to understand how such assemblies of amyloid b protein affect memory and therefore pave the way to identify diagnostic tests and/or therapeutic strategies.

#### Professor Stefan Oscarson, CSCB

*Title:* Chemical Biology on Carbohydrates - Approaches Towards Potential Drugs and Vaccines Against Infectious Diseases and Cancer

**Synopsis** Carbohydrates are molecules that are ubiquitous in our daily lives, being the building blocks of sugars, starches, and various natural materials. Prof. Oscarson's group will synthesise carbohydrates that mimic those made by bacteria, and will produce antibodies against these that can assist in the treatment of disease and allow the production of vaccines for meningitis, and other conditions.

#### Dr Seamas Donnelly, UCD School of Medicine & Medical Science/St Vincent's University Hospital

*Title*: Macrophage Migration Inhibitory Factor (MIF), enzymatic activity & pulmonary disease. *Synopsis*: Chronic inflammatory lung diseases such as asthma and cystic fibrosis are a major burden on patients and the Irish health system. Dr Donnelly's research focuses on an important molecule, Macrophage Migration Inhibitory Factor (MIF), and investigates its role in driving inflammatory disease processes. The ultimate goal of this research is to deliver novel candidate anti-inflammatory therapies that target MIF action to improve quality of life for those with chronic inflammatory lung disease.

#### Stokes Professor of Physical Chemistry Gil Lee, UCD School Of Chemistry & Chemical Biology

*Title:* Single Molecule Instrument Research Program: Force Measurements in Live Cells and Multiplexed Pathogen Detection

**Synopsis:** Advanced techniques that allow a study of the mechanics and physical properties of biomolecules can provide answers to key questions in biology and medicine. Prof. Lee will utilize state-of-the-art apparatus to provide a new insight into the detection and, consequently, treatment of viruses, nerve damage, and other ailments.

#### Dr Brian Vohnsen, UCD School of Physics

Title: Adaptive Photonics for Nanoscale Bioimaging

**Synopsis:** Collagen is a protein that is present in many parts of the body, such as the skin, tendons, and the eye. Dr Vohnsen will use light-based techniques (imaging and microscopy) to study tissues rich in collagen in order to find structural evidence for optical and other diseases and conditions.

#### Dr David MacHugh & Professor Stephen Gordon, UCD School of Agriculture, Food & Veterinary Medicine *Title:* Functional genomics and proteomics studies of bovine tuberculosis

**Synopsis:** Dr MacHugh and Dr Gordon will address a key problem affecting the Irish agricultural sector i.e. Bovine Tuberculosis. This research will study the bacteria causing the disease and propose new ways of eradicating bovine tuberculosis, through better diagnosis and more efficient treatment.

#### Professor Chen-Ching Liu, UCD School Of Electrical, Electronic & Mechanical Engineering

*Title:* Vulnerability Assessment and Mitigation of Information and Communication Systems for Critical Infrastructures

**Synopsis:** Prof Liu's work will protect mission-critical infrastructures - such as electric power grids or natural gas pipelines - from cyber attacks. Cyber intrusions into critical information and communication technologies will be detected and stopped before an attack can disrupt critical physical systems such as electricity grids.

#### Dr Alexey Lastovetsky, UCD School Of Computer Science & Informatics

#### Title: High-performance heterogeneous computing

*Synopsis:* As Cloud computing becomes reality we need better tools and algorithms to efficiently use the huge clusters and global networks of computers needed to solve scientific problems that require massive computing power, such as climate change modeling. Dr Lastovetsky collaborates with the world-leading expert Prof Jack Dongarra (University Tennessee) and IBM in developing these tools that can be exploited by the larger scientific computing community



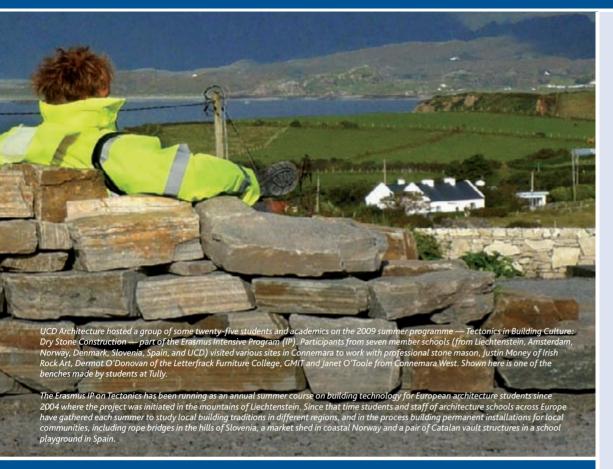
UCD postgraduate student Laura Battie is shown here with secondary school student Rìona Walsh from the Ursuline Convent Sligo measuring reaction times in the Neruoscience practical in the UCD School of Biomolecular and Biomedical Science during the UniLife Science School. Rìona was one of hundreds of secondary school students who attended the UCD Unilife programme in June 2009. Students could get hands-on experience in Science, Architecture, Agri-food & Nutrition or Law during the tailored programme for fifth-year secondary school students. Parcipants attended real lectures and tutorials, learned about career opportunities, and focussed on exploring subject options within discipine areas.



In recognition of his outstanding contribution to the understanding of memory, Nobel prize-winning scientist Professor Eric R Kandel was awarded the UCD Ulysses Medal in September 2009, at the UCD Convay Institute Festival of Research and Innovation. Professor Kandel gave a lecture at the event, entitled "The long and short of long-term memory" and outlined his scientific work and discoveries which culminated in the 2000 Nobel Prize in Physiology or Medicine (jointly awarded to Arvid Carlsson and Paul Greengard)



Laurence Crowley, Founding Executive Chairman of UCD Michael Smurfit Graduate Business School was awarded an Honorary CBE by Queen Elizabeth II for services to UK-Irish relations in Summer 2009



### Madness, Migration and the Irish in Lancashire

Dr Catherine Cox, UCD School of History and Archives and Professor Hilary Marland, University of Warwick, have secured funding from the Wellcome Trust for a ground-breaking 3-year project on the relationship between Irish migrants, ethnicity and mental illness from c.1850 to 1921.

Currently, one of the ongoing challenges within history and psychiatry is to explain high rates of psychological disturbance amongst migrants and minority ethnic groups more generally. In the historic and contemporary literature, the relationship between migration and mental illness has been variously linked to exposure to new social demands and cultures, isolation, trauma, discrimination, and deprivation. This project takes the particular case study of migration to Lancashire from the final years of the Great Famine to Irish Independence (c.1850-1921), to explore the relationship between Irish migration and mental disorder. During this period, Irish patients presented huge management problems to asylum superintendents, local government and welfare agencies; care systems, in a similar way to

health and welfare services today, were overstretched and under-resourced.

The project will examine whether there were particular stereotypes concerning the Irish which influenced their admission to the asylum and experiences of care, and how concerns about the very visible rise in their numbers were linked to changing debates about insanity, including the impact of degeneracy, race and gender, at a time of massive growth in asylum numbers overall. Uniquely, this project will situate the experiences of Irish pauper asylum patients and those treating them within a broader canvass of efforts to manage perceived and real problems of disease, poverty, and intemperance amongst Irish migrants. The researchers on the project will undertake innovative historical research and, through events and publications, inform and engage with current debates on high levels of mental illness amongst Irish people, and the relationship between mental health problems, ethnicity and migration. The main outputs will comprise a co-authored book, three articles, a workshop, conference and public engagement activities.



In July 2009, incoming students had the opportunity to prepare themselves for their university futures. UCD Open House helped students answer that very important question, "What do I do when I get my CAO offer?"

The first event of its kind in the Irish university sector, UCD Open House was a series of four open information sessions for CAO applicants who were awaiting their offers and hoping to achieve a place in UCD. CAO applicants, their parents, and families from all across Ireland, and the UK, attended the small-group sessions.

"UCD Open House is very important in bridging that gap between CAO application deadline and becoming a UCD student," says UCD Director of Student Recruitment, Anne-Marie Harvey. "Our aim was to provide incoming students with all the relevant information they needed for their first few weeks in university. Equipped with this knowledge, they could then concentrate on settling in, getting engaged and making friends, which is vital at third-level."

The events were held on an informal basis, which allowed the students and parents who attended to have individual chats about any academic, social or other aspect of university life. They also had a chance to take a tour of campus.

UCD Open House complemented Orientation Week, which was held in early September for all incoming students.

Show here are Alwyn Duffy, Olwyn Downey, Katie Power and Jenny O'Doherty, who joined UCD in September 2009. Events such as Open House and Orientation prepare students for university life



### findit @UCD Library

UCD Library users now have a new way of accessing all electronic resources via the redesigned Library homepage. find*it* @UCD Library enables users to simultaneously search a range of electronic products by resource type or subject via a number of different routes. Journals can be sourced using the Journals search option, with full text links where available. Personalisation features are provided via the My Research option, enabling users to save results and searches, set up alerts and create database lists for future use.

Select 'Electronic Resources' on www.ucd.ie/ library to find out more





### Major role for UCD in Development Practice Education and Training

UCD and Trinity College Dublin, in partnership with the University of Rwanda, Trócaire, the Ethical Globalisation Initiative, and Kimmage Development Centre, have been awarded \$900,000 (€640,000) by the MacArthur Foundation, one of the largest independent foundations in the United States, to establish Ireland as the European Hub for the provision of Development Practice Education and Training.

The award is part of an \$8 million worldwide initiative by the MacArthur Foundation to tackle the challenges in global sustainable development. The joint Irish entry was selected from more than 70 proposals worldwide.

The award will be used to create a joint UCD-TCD Masters Degree in Development Practice which will train the next generation of development experts and provide them with the knowledge and skills required to tackle the challenges of global poverty and environmental sustainability.

#### UCD lecturer Dr Tom Curran wins international ASEE award

Dr Tom Curran, lecturer at the UCD School of Agriculture, Food Science and Veterinary Medicine has been awarded the 2009 Award for Excellence in Teaching Materials and Methods in Biological and Agricultural Engineering by the American Society of Engineering Education (ASEE).



Engineering Education (ASEE). This international award recognises an

individual or group of individuals in the development and dissemination of excellent teaching materials and methods in Biological and Agricultural Engineering.

The award was made to Dr Curran in recognition of the high quality teaching materials he developed for first year Biosystems Engineering students. This is the highest award of the ASEE and the first time that the award has been given to an international member of the Biological and Agricultural Engineering Division. According to the United Nations, 1.4 billion people around the world live in extreme poverty today (<\$1.25 per day). As governments across the world grapple with the financial meltdown resulting from the current global economic crisis, global assistance to development has reduced by at least \$4.5 billion annually having an enormous impact on the poorest in the world.

Recently commenting on the cut in the Irish Government's overseas aid, former President of Ireland and former UN Commissioner for Human Rights, Mary Robinson, whose Ethical Globalisation Initiative is one of the partners in the Irish programme, expressed her concern stating that the cuts were "proportionally more severe than in any other European country". She also noted at the time that Ireland had "a deserved reputation" in the area, and she urged the Government to investigate "more innovative, high-tech ways" of helping developing countries. "The \$900,000 award by the MacArthur Foundation to University College Dublin and Trinity College Dublin is a testament to the fact that Ireland has the best government agency (Irish Aid), NGOs and academics in Europe in the development area," says Professor Paul Walsh, UCD School of Politics & International Relations, an expert in International Development Studies and chair of the new initiative. "Being chosen to receive this award allows Ireland to play a critical role in training the next generation of development practitioners in a global classroom."

Up to 40 students are expected to enroll on the Irish programme when it first begins in 2010. By 2012, a total of 250 highly skilled graduates are expected to emerge from the Masters Degree in Development Practice provided by the 10 universities from around the world who received the awards from the MacArthur Foundation.

### Nobel prize-winning scientist receives UCD Ulysses Medal

Professor Richard Ernst who received the Nobel Prize in Chemistry (1991) for his methodological developments within nuclear magnetic resonance (NMR) spectroscopy has been awarded the UCD Ulysses Medal in recognition of his global contribution to science.

As a result of Professor Ernst's scientific developments, which enabled a dramatic increase in both the sensitivity and the resolution of the instruments, NMR spectroscopy has possibly become the most important instrumental measuring technique in chemistry.

Today, NMR spectroscopy is used in almost every branch of chemistry in universities and industrial laboratories alike. It is also used in other sciences like physics, biology and medicine. The primary application of NMR is to determine molecular structure in solution. NMR is also used by chemists to investigate interactions between different molecules, to study molecular motion, to retrieve information on the rate of chemical reactions.

The growing importance of NMR to science is clearly recognized by the Nobel Committees in Stockholm. Eight Nobel Prizes have been awarded for achievements in NMR. Several Nobel Laureates who significantly

contributed to NMR received their prizes for innovations in other fields.

After receiving the UCD Ulysses Medal from UCD President, Dr Hugh Brady, Professor Ernst delivered a special lecture to the meeting of Irish NMR at the UCD Conway Institute, introduced by Dr Chandralal Hewage from the UCD School of Biomolecular & Biomedical Science. In the lecture, Professor Ernst outlined the various contributions to NMR of those who have been honoured by a Nobel Prize and others who may have equally deserved to receive the honour.



# UCD Historian awarded largest European Research Council personal grant in the Humanities

Dr Robert Gerwarth, UCD School of History & Archives, has been awarded a European Research Council personal grant of between €1.2m and €1.5m for a ground-breaking 4-year project on the transnational history of failed demobilisation and paramilitary violence from Ireland through Europe and across the wider world after the Russian revolution and the end of the Great War.

This is the first time that such an award has been made to a humanities scholar in Ireland. It is also the largest EU research grant ever made for a humanities project in Ireland. The Chair of the Irish Research Council for the Humanities and Social Sciences, Professor Maurice Bric puts Robert Gerwarth's achievement in context. "The ERC award is the highest accolade which any scholar can achieve in the European Research Area. I congratulate Dr Gerwarth on his achievement. It is a testament to his originality as a humanities scholar and establishes him among the most elite of European academics. It is a great honour for him, for Ireland and for UCD".

The project builds on a substantial seed funding grant of  ${\in}300{,}000$  awarded to Dr

Gerwarth by the IRCHSS after a rigorous peerreview process last year. The grant will boost research activity at Dr Gerwarth's Centre for War Studies at UCD and intensify collaboration with national and international partner institutions.

The European Research Council Independent Researcher Grants are the most competitive academic awards worldwide. They are designed to support internationally recognised research leaders from across the globe to undertake pioneering frontier research in Europe and to create new research centres of excellence.

# UCD Rowers in unique head-to-head at Henley

UCD A (Senior) and UCD B (Intermediate) Rowing VIIIs met in July in the last 16 of the Temple Cup at Henley Royal Regatta in what was a unique head-to-head for the saffron and blues. The Seniors had a comfortable win and went on to face the overall winners of the event, Princeton.

The Senior VIII suffered a setback earlier in the week when Sean O'Neill was knocked from his bike by a car after rowing and sustained a badly broken collar bone. Luckily, Colm Pierce who was in the 2008 Gannon-winning crew was able to fly from Spain to Henley to replace O'Neill. Their first round win over Eton by 21/4 lengths confirmed the quality of the crew and justified their seeding among the top 8 in the 32-crew competition.

In an outstanding first round performance, the Intermediate VIII beat Shrewsbury by 1 length. Their original aim was to qualify for one of the 14 available places in the main draw and did so by being one of the top 6 fastest qualifiers among 39 crews.

The Senior VIII UCD A crew: Stroke, Anthony English, 7 Richard Skelly whose father Jim was in the 1974 UCDBC Ladies Plate winning VIII (UCD's only ever win at Henley), 6 Finbarr Manning, 5 Tom Doyle, 4 Dave Neale, 3 Dylan Finnerty, 2 Colm Pierce, Bow Daragh O'Reilly, Cox Naoise Grisewood.

The Intermediate VIII UCD B crew: Stroke, Richard Murray, 7 Alan Murray 6 Emmet Feeley, son of Martin who was also in the 1974 UCD BC Ladies Plate winning VIII, 5 Simon Craven, 4 Travis Greene, 3 Peter Murphy, 2 Pat Courtis, Bow Philip Craven brother of Simon and Cox, Jenny Lynch.

Coaches: John Holland, Colm Daly & Conor Walshe. Only 4 of the 16 students rowed pre-university.

In the Prince of Wales Challenge Cup event two UCD alumni, Sean Jacob and Con Collis, representing Old Collegians BC along with two rowers from London Rowing Club competed against Sir William Borlase's & King's School, Ely in quadruple sculls. Seeded among the top four in the event, the OC/London crew went on to the semifinal of the competition, which was ultimately won by Durham University & Oxford Brookes.

Considered the most prestigious rowing club regatta in the world, Henley attracts top crews from Europe, the US, New Zealand and Australia. The standard is always particularly high the year after an Olympics and this year is no exception. Unlike multi-lane international regattas, Henley still operates a knock-out draw with only two boats racing in each heat. This entails the organisation of up to 100 races on some of the five days of the regatta. The length of the course is 1 mile 550 yards, which is 112 metres longer than the standard international distance of 2,000 metres and takes approximately seven minutes to cover.

# Moving up in League of Ireland

UCD currently sits proudly atop the First Division League of Ireland after a record-equalling 5-0 win against Finn Harps in mid-September propelled them to the top of the competition. A subsequent win over Kildare County and a draw with Shelbourne secured the position.

In the decisive match on 14th September against Donegal, a Ronan Finn penalty was added to by Evan McMillan on the stroke of half time. Ciaran Kilduff added a goal on 46, with Dave McMillan and Kilduff adding further goals to seal UCD's joint biggest away win in senior football, equalling 2000's famous 5-0 win in Drogheda which secured InterToto qualification.

Harps started well and Michael Funston was twice denied by UCD goalkeeper Gerard Barron early on, while Christy Conaghan darted into the box only to see a decent shot blocked on the line by Andy Boyle. But it was UCD who took the lead on 34 minutes following a controversial penalty award. Referee Phil Caschera adjudged that David McMillan was fouled as he became sandwiched between defenders Ian Rossiter and Packie Mailey. Harps protested furiously but the decision stood and UCD captain Ronan Finn made no mistake from the spot.

Suddenly UCD found a spring in their step and started knocking the ball about with more authority. And, on the stroke of half-time, they increased their lead as John Reilly crossed from the left and Evan McMillan rose to firmly head into the net.

Harps' problems were compounded less than 90 seconds into the second half when UCD made it three with Ciaran Kilduff letting fly with a cracking, swerving 25-yard effort that Ciaran Gallagher got a touch to, but could not prevent from going past him. UCD then took full control and David McMillan made it four with a spectacular effort on 67 minutes while Kilduff skipped past the advancing Gallagher to tap into an empty net for the fifth on 74 minutes.

UCD: Barron, Shortall, Nangle, Boyle, E. McMillan, Corry, Reilly, Finn, Kilduff, McMahon, D. McMillan. Matthews for Shortall (56 mins), Mulhall for McMahon (58 mins), Purcell for Reilly (72 mins).

# UCD student excels under guidance of the High Performance Centre

Second Year Science student, Steven Colvert achieved remarkable double success over the summer at the Athletic Ireland National Senior Championships, winning bronze in both the 100m and 200m with times of 11.08 and 21.99 respectively.

Steven took up Athletics when he came to UCD in September 2008.

He says, "Before coming to UCD the only Athletics I ever took part in was the School Sports Day 100m. During freshers week last year I signed up for UCD Athletics club along with two or three other sports clubs. At first I found athletics very difficult but very rewarding. My coach (Hugo Leeney) was fantastic. He spotted my talent and pushed me to Silver in the intervarsities in April. After getting the Silver I was invited to train with Lisa Regan and her staff in the UCD High Performance Centre. After a very brief time under their guidance I ran a new PB of 10.77, after this time I was chosen to run for the Irish Senior Team in the 4x100m relay and the guest 100m out in Slovakia at the European Team Championships. Soon again after this with the help of UCD High Performance Centre's programme I ran my current PB of 10.65. In terms of Athletics at the moment I am currently ranked 3rd in Ireland for both the 100m and 200m after taking double Bronze at the National Seniors in Santry this year along with All Ireland Junior 100m Champion. It really has been a fantastic first year in Athletics and I hope with the help of UCD Athletics I can lower my times and achieve my full potential."



UCD Sailing Club member Annalise Murphy, 2nd Year UCD Science student, is a member Irish Sailing Association's development squad of sailors. In July 2009, Annalise, who is currently on a break from UCD, competed in the World Laser Radial Women's Championship in Japan and was successful in winning the world under-21 laser title. This Olympic Class female single handed discipline class attracted 30 Nations and 87 world class sailors who had all prequalified in their regions

# stoday

# News



# Lead role for UCD scientist on ocean expedition

Guided by satellite communities and oceanographic data, The Tara, a thirty-six metre schooner fitted with the most advanced technologies for investigating planktonic life in the world's oceans will set sail in September from Lorient in France for a three-year scientific expedition of the world's oceans.

The Tara Oceans expedition will collect and analyse hundreds of thousands of samples of plankton from the world's oceans at depths of up to 2,000 meters below the surface.

Combining the most advanced techniques of cell imaging and genetics with those of oceanography and ecology, this comprehensive mapping of the world's plankton will enable the measurement of the impact of CO2 emissions on this oxygenproducing sea life species, the basis of all life on Earth which absorbs 50% the world's CO2 production.

Cell biologist, Dr Emmanuel Reynaud from the UCD School of Biology and Environmental Science, University College Dublin, who is originally from France, is coordinating the microscopy and cytometry equipment on the boat and is responsible for the scientific imaging of all the plankton samples collected.

The international team of oceanographers, ecologists, biologists and physicists from laboratories throughout the world, will also







#### Tara Oceans Expedition route

explore sites where ocean life has been disturbed or shows signs of unexpected adaptation. The expedition will also visit and compare major coral reefs, and record levels of marine pollution.

"50% of the world's CO2 production is absorbed by planktonic organisms, most of which measure less than 1mm," says Dr Reynaud. "These organisms are at the very origin of life, and play a significant role in the climate engine. The fact that the sea plays a role in regulating the climate is well documented. In a sea environment, plankton plays the same role as plants in a land ecosystem."

The findings from this expedition will help scientists to explain how plankton adjust to abrupt changes in the environment and to understand under what climate change conditions ocean desertification might occur. "Our future is bound to the fate of the microscopic life in the oceans," he says.

Over the course of the three years, the Tara schooner will travel approximately 150,000km

across the Arctic Ocean, Atlantic Ocean, Pacific Ocean, and Indian Ocean. The boat will visit about sixty ports in 50 countries.

The route for the expedition was put together based on: the areas for research chosen by the scientists; the progress of the seasons in the northern and southern hemisphere; and the direction of prevailing winds because Tara is a sailing ship.

Tara Oceans continues the heritage of pioneering expeditions, such as the HMS Challenger Expedition, initiated by Charles Wyville Thomson, a former Professor of Botany at the Royal College of Science of Ireland (now the School of Biology and Environmental Science at UCD), which formed the basis for oceanography, hydrography and marine biology.

The expedition costing approximately  $\in$  15 million, is run by the Tara Endowment Fund and the expedition can be followed in real time at *www.taraexpeditions.org*