Barriers and molecular trains trap Joubert Syndrome protein in cilia

A cilia disease protein causing Joubert Syndrome, ARL-13, is actively trafficked across the base of cilia and molecular diffusion barriers prevent its exit, according to new research from Principal Investigator, Dr Oliver Blacque of UCD School of Biomolecular and Biomedical Science.

Primary cilia are hair-like projections extending from the surfaces of most human cell types that serve as important antennae to relay external sensory and signalling information back to the cell. Disrupting cilia structure or function leads to a wide range of diseases, termed ciliopathies, linked to multiple symptoms including cystic kidneys, blindness, bone formation defects, mental retardation and obesity.

An important feature of the cilium is its compartmentalised nature. This allows many proteins, including those involved in ciliopathies to become specifically enriched within the structure where they function. Although not well understood, the process of ciliary compartmentalisation is thought to involve active transport systems such as intraflagellar transport (IFT) and molecular diffusion barriers at the ciliary base (transition zone).

Using a combination of genetics and live imaging approaches, Dr Oliver Blacque and his team in SBBS have recorded the movement of molecules across the base of cilia in real-time, which provided kinetic information about the barrier itself. They believe this is the first time fluorescent recovery after photobleaching (FRAP) has been used in an ‘in vivo’ setting to assess protein diffusion into and out of cilia. The team showed that proteins causing Meckel syndrome and nephronophthisis, which are symptomatically related to Joubert syndrome, comprise a barrier at the transition zone that prevents leakage of ciliary membrane-associated ARL-13 out of cilia. In contrast, they found that IFT proteins play no role in barrier formation but instead are required for actively transporting ARL-13 across the barrier.

Commenting on the significance of the research, Dr Blacque said, “We have been able to directly test ‘in vivo’ the interplay of active transport and membrane diffusion barrier mechanisms in restricting proteins to cilia. We found that Joubert syndrome-associated ARL-13 can act as a cargo of intraflagellar transport (IFT) trains as they move from the periciliary membrane into the cilium, across a transition zone barrier directly regulated by MKS and NPHP (cilia disease) proteins.

Continued on page 2

Irish Cancer Society funds three SBBS research projects

SBBS PhD students, Clare Butler and Brian Mooney and postdoctoral fellow, Dr Sudipto Das were among six early career researchers to receive Irish Cancer Society Research Fellows and Scholars awards at a ceremony in Dublin on Wednesday, November 27th.

Clare Butler will work in the laboratory of Conway Fellow, Dr Breandán Kennedy to investigate the potential of a number of new compounds to treat colorectal cancer. Brian Mooney and Sudipto Das are both members of Dr Darran O’Connor’s team and will investigate areas of cancer therapeutics. Brian is aiming to gain an insight into how some breast tumours become resistant to treatment with Tamoxifen, one of the most common anti-estrogen drugs used to treat estrogen receptor positive breast cancers. Sudipto will investigate the role of epigenetics in regulation of the angiogenic switch and patient response to anti-angiogenic therapy in metastatic colorectal cancer (mCRC). The angiogenic switch is a discrete step in tumour development which ultimately allows progression to a malignant state. Sudipto’s project will involve examining epigenetic factors such as DNA methylation and microRNAs, as well as their interaction in regulating the angiogenic switch and ultimately contributing to patient response to therapy.
Continued from page 1

These findings extend our previous work that suggested a diffusion barrier at the ciliary base, and again show how nematode genetics and imaging serve as powerful allies for uncovering basic principles of cell biology and human disease gene pathomechanisms."

The Blacque team, who led the entire study, worked in conjunction with the UCD Conway Imaging Core facility to develop the FRAP technique. They also collaborated with colleagues in the Universities of Radboud and Tuebingen to identify the composition of human Arl13b complexes using semi-quantitative and quantitative (SILAC) affinity proteomics.

Dr Blacque and his team now hope to use their FRAP assay to uncover more genes directly responsible for establishing diffusion barriers at the ciliary base and define their precise kinetic contributions to barrier function.

At a wider level, this work will help to shed light on how important signalling processes are confined to small regions of the cell’s plasma membrane.


Lectureship and Conway fellowship for Dr Darran O’Connor

Dr Darran O’Connor has recently been appointed to a 5 year research funded Senior Lecturer position within SBBS and has also been awarded Conway Fellowship.

Dr O’Connor has been with SBBS since 2009 and has successfully built an independent research group which currently consists of 3 postdoctoral fellows and 3 PhD students (funded by the European Commission, Science Foundation Ireland, The Irish Cancer Society and the Irish Research Council for Science, Engineering and Technology). Dr O’Connor’s group has extensive experience in the discovery of molecular determinants of cancer progression and their use in the molecular and clinical analysis of a number of different tumour types. Dr O’Connor has a number of funded collaborations through the SFI strategic research cluster, Molecular Therapeutics for Cancer Ireland and EU FP7 health programme, AngioPredict.

Novel drugs to treat depression

Professor Ciarán Regan has recently filed a patent describing the use of the drug captodiamine in the treatment of depression.

Chronic stress can give rise to psychological state in which it becomes impossible to experience pleasure (anhedonia) and this is a core feature of major depression. The patent demonstrates captodiamine to be a drug that reduces stress-induced anhedonia and the associated increases in corticotrophin releasing factor (CRF), a peptide that activates the response of the hypothalamic-pituitary-adrenal (HPA) axis to stress. Secondly, the patent shows captodiamine to correct stress-induced losses of hypothalamic brain-derived neurotrophic factor (BDNF) and to restore the functional activity of its component neural circuits. These specific actions of captodiamine provide a fundamentally new mechanism to enable the development of antidepressant medications for the treatment of specific subtypes of depression dominated by states of anhedonia. Captodiamine is known to be safe in humans and to lack the weight gain, sexual dysfunction and sleep disturbances associated with other antidepressants.

Smart coasts and healthy cows

Professor Wim Meijer has recently been the recipient of two grants.

The first of these, an EU Interreg IVa ‘Smart Coasts = Sustainable Communities II’ grant is in collaboration with Professor David Kay of Aberystwyth University. The aim of the project is to improve the quality of coastal water of western Wales and eastern Ireland in an effort to boost tourism and support local economies and will build upon a previous EU funded project.

Professor Meijer’s second grant has been awarded by the Department of Agriculture, Food and the Marine, for the project ‘Early diagnosis of postpartum uterine disease for enhancement of reproduction and improved cow health’. Microbial infection of the uterus can affect up to 50% of all dairy cattle after calving causing infertility by disrupting uterine and ovarian function. Early diagnosis and treatment are crucial for improving cow health and for maintenance of fertility in the dairy herd. This project is in collaboration with Professor Alexander Evans, (School of Agriculture and Food Science), and Dr Erin Williams, Professor Stephen Carrington, and Professor Mark Crowe (School of Veterinary Medicine).

USA and Brazilian students sample research in SBBS laboratories

This Semester 16 study abroad students from the USA and Brazil carried out research projects as part of the “Introduction to Research” module across different schools in the College of Science.

SBBS hosted 8 of these students in the laboratories of Dr Kevin O’Connor, Dr John O’Connor, Dr Keith Murphy, Dr Gethin McBean, Dr David O’Connell, Dr Tara McMorow, Dr Tadhg O Croinin and Dr John Crean. Projects were carried out in areas including infection biology, neuroscience and synthetic biology. The students are pictured below with the Associate Dean for International Study, Dr Tadhg O Croinin.

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A cell biased effect of estrogen in prion infection

The group of Dr Hilary McMahon has identified a cell biased role for estrogen and its receptors in the prion disease system. This is the first time that the estrogen system has been linked with prion disease regulation.

Classical prion disorders or Transmissible Spongiform Encephalopathies (TSEs) are generally associated with the accumulation in the brain of an abnormal partially protease resistant isoform (PrPSc) of the endogenous prion protein (PrPC). TSEs are fatal neurodegenerative disorders that include Bovine Spongiform Encephalopathy (BSE), scrapie and chronic wasting disease (CWD) in animals, and Creutzfeldt-Jakob disease (CJD), Gerstmann-Sträussler-Scheinker syndrome and Fatal Familial Insomnia in humans. Research in the area of the prion protein (PrPC) is now expanding past the role of PrPC in TSEs. New concerns have emerged over the potential impact of the prion in Alzheimer's disease (AD) development.

Dr McMahon’s group investigates the role that the prion protein has in classical prion disorders, regulatory aspects of the cell, and also in its evolving role in Alzheimer’s disease.

In a recently published paper in the Journal of Virology, Dr McMahon’s group has shown, that estrogen is a regulator of PrPSc production. It acts in a cell biased manner. In a prevention paradigm it reduces prion infection (iPrPSc) efficiency, whereas in chronically infected cells in a treatment paradigm it maintains PrPSc (see image). The effect of estrogen on PrPSc related to the response of its receptors Erα and Erβ, which switches depending on the paradigm. Erα protects against prion infection, whereas Erβ is more responsive than Erα in maintaining PrPSc post infection. The work demonstrates a dual role for estrogen in the prion system and provides a potential prevention/treatment avenue for these disorders.


PhD student Claire Shortt won the prize for best postgraduate presentation at the National Childrens Research Centre’s Annual Symposium.

Claire, who works in Dr Tadhg Ó Croínín’s group presented a talk entitled “The title of the presentation was “DNA topology plays a key role in influencing motility and flagella gene expression in Campylobacter jejuni”

Campylobacter jejuni is the leading cause of bacterial gastroenteritis worldwide. It is a natural coloniser of chickens but forms a pathogenic interaction within the human intestine. This study demonstrated that C. jejuni can exploit the architecture of its DNA to regulate motility. A correlation between relaxed DNA and low levels of motility, or increased supercoiling and high levels of motility, was firmly established. A novel putative DNA supercoiling-motility regulon was identified, which is defined by the divergent expression of a two component regulatory system FlgSR. In addition, mucus acts as a stimulus to alter DNA supercoiling and motility. Chicken mucus elicited a response which was the opposite of human mucus, as it stimulated motility and DNA supercoiling. Conversely the human mucus repressed motility and relaxed DNA supercoiling. Chicken mucus promotes colonisation, whereas human mucus enhances infection.

The study helps to elucidate the mechanism of Campylobacter infection and may lead to new treatment options.

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Congratulations to SBBS students conferred with MSc Biotechnology and MSc Biotechnology & Business degrees, at a ceremony in O’Reilly Hall on 4th December.

This year 18 students graduated with an MSc in Biotechnology and a further 16 with an MSc in Biotechnology and Business. The MSc in Biotechnology and Business is run in association with the UCD Michael Smurfit Graduate Business School. The conferring ceremony was followed by a school reception in the UCD O’Brien Centre for Science at which prizewinners were announced. Joint recipients of the school’s medal for the MSc in Biotechnology and Business (2013) were Michael Gallagher and Una Harrington. Niranjan Bhaskaran was awarded the Catherine (Renee) Kelly Biotechnology award (sponsored by the Food Safety Authority).

At the same conferring ceremony MSc by research degrees were awarded to Eimear De Poire, Paula Hyland and Dinesh Medipally. PhD degrees were conferred on Leona Connolly, Alan Corcoran, William Casey, Brenda Griffin, Henriette Laursen, Alexandra Mably and Asma Tamar. Three further SBBS students were conferred with PhDs on 3rd December, Alessandro Riccombeni, Sarah Maguire and Xiaoguang Wang.

MSc and PhD Students Graduate
Breaking down the language barrier between research and management

A knowledge complexity reduction process not only simplifies complex R&D data, but also builds trust.

An amusing and probably apocryphal story did the rounds of the British research community some years back. It concerned a conversation between a head of research and his managing director and concludes with the research scientist saying to her completely befuddled boss “I can explain it for you but I can’t understand it for you.”

This is the problem being addressed by Jan Rosier, newly appointed Institute Élan Professor of The Business of Biotechnology at the UCD Conway Institute.

A former vice president for drug development at Johnson & Johnson, Prof Rosier’s research focuses on the role of chief executives in innovation in life science R&D firms.

“Scientists have become so specialised in their different areas that it is difficult for outsiders to understand what is going on in those areas”, he notes. “If you see an article in Nature or another journal about a new drug or other development in the life sciences industry you now need a scientific background to read it. I am interested in how the people at the apex of organisations are going to deal with that increased level of complexity.”

Heart of the problem

At the heart of the problem is people from the two areas are effectively speaking different languages – the language of business and finance and the language of science and research.

“How are they going to understand each other?” Prof Rosier asks. “Where is the overlap between their areas? We should be concerned about the possibility that CEOs become spectators in the R&D process. That would not be the wisest thing to allow happen.”

This can lead to serious problems for companies which rely on research outputs for future success. This is particularly the case in the life sciences and other high tech areas where new product pipelines are critically important. The difficulty lies in the fact that the cheques for the R&D activity have to be written by the CEO and CFO and if these people don’t understand what’s going on in the research department the money is unlikely to be forthcoming or, equally damaging, making it available for the wrong things.

“It can happen when the corporate strategy is being developed by the CEO and the management team a different strategy is being built in R&D where they are creating competitive knowledge,” Rosier explains.

He cites an example given by former Intel CEO Andy Grove in his book Only the Paranoid Survive. “He wrote that at one point he and the management developed a strategy but at the same time R&D was developing new products which completely changed that strategy.”

But at least Grove and Intel paid attention to what was happening in R&D and acted upon it. Many of the other IT giants competing with Intel in Grove’s time no longer exist because they ignored their research departments and failed to keep pace with industry developments.

And the price can be even higher with research carried out by Insead in France showing how a major pharmaceutical firm put a drug with known side effects on the market because the managers in overall charge didn’t understand the information given to them by the research department.

“This is why we need to find a way to get these people talking to each other in a way that is good for innovation,” Rosier points out.

Carrying out research

Over the past five years he has been carrying out research into the problem and has interviewed life sciences industry CEOs and research leaders in the process.

“We asked the ceos how they managed innovation and R&D and one of them said he didn’t understand science and was a bit annoyed by it because it made him feel insecure. Even ceos who had scientific backgrounds felt insecure because the pace of change in the industry meant that once they were out of the lab for a few years they were at a disadvantage to those who stayed in it. What is needed is some kind of a platform or shared space where the two groups can meet.”

The R&D people interviewed recognised the problem and the gap in knowledge which exists. “They often referred to the issue of trust between them and the ceo and said if they weren’t trusted they couldn’t develop the new products needed by the firm. The question is how do you build trust between the two and the R&D people offered part of the solution. They pointed to a need to transform scientific knowledge into a language which could be understood by ceos and other managers.”

One solution he is considering is the establishment of new departments in firms to perform this function. “Maybe you need a separate department with the people who can confidently translate complex knowledge into a form that can be absorbed by non-scientists and used by top management. I am not arguing that the ceo of a life sciences firm should be a scientist but that they should be able to develop their absorptive capacity to help them understand complex information.”

His aim is to create a virtuous circle where the act of making the information understandable to non-scientific people actually assists in the development of their absorptive capacity thereby improving their ability to understand complex information.

“By making complex R&D data understandable to the ceo, the ceo develops their capacity to absorb new knowledge and because of their growing understanding of R&D knowledge can develop greater trust in R&D. A knowledge complexity reduction process not only simplifies complex R&D data, but also builds trust, which is the cornerstone of effective leadership.”

“When the ceo has information they understand they can share it with others and help the organisation achieve its strategic goals much more effectively.”

Barry McCall
Original article in The Irish Times Monday
Five SBBS Principal Investigators receive SFI Technology Innovation Development Awards

Science Foundation Ireland announced the Technology Innovation Development Awards (TIDA) on 15th November. The recipients included five SBBS Principal Investigators. All five projects are in the diagnostic and therapeutic field.

In the area of cancer therapeutics, Dr Margaret McGee will look at the clinical validation of a novel mechanistic tumour biomarker and its application in an in vitro diagnostic test to predict patient sensitivity to a number of approved and prospective targeted anti-cancer agents.

The second award was made to Dr John Crean who is one of Principal Investigators in the UCD Diabetes Research Centre. Dr Crean’s group have identified a cohort of TGFβ receptor silencing micro RNAs (miRNAs) that regulate the acquisition of pluripotency and cell fate and are differentially expressed in diabetic complications including nephropathy and retinopathy. The project will investigate the diagnostic and prognostic value of this “fingerprint” and importantly explore the manipulation of these miRNAs for therapeutic benefit.

Of general benefit to the development of therapeutics, Dr David O’Connell will investigate ‘A novel protein display technology to expand and enhance biosensor measurement of therapeutic molecule kinetics’.

Professor Therese Kinsella will examine the use of Thromboxane receptor antagonists which are potential therapeutic agents for asthma, thrombosis and hypertension. Her project is entitled ‘Characterization of Novel Thromboxane Receptor Antagonists: Efficacy Studies to Prioritize the Target Market’.

The final award ‘Biocompatible biopolymer as a neural cell regeneration scaffold (smart material for tissue regeneration)’ is a collaborative project between Dr Federico Cerrone SBBS, Dr Kevin O Connor SBBS, Dr Keith Murphy SBBS, and Dr Ramesh Babu (CRANN TCD). The project will investigate the use of a biocompatible and biodegradable polymer for directed growth of nerve cells. This interdisciplinary project brings together Microbiology, material science, and pharmacology.

Advances in teaching and learning

In May Dr Carmel Hensey, Head of Teaching and Learning in SBBS, completed training as a Supplemental Instruction (SI) and Peer Assisted Study Session (PASS) Supervisor.

The course was held at the University of Manchester, which is the UK National Centre for PASS. Dr. Kathy O’Boyle (SBBS and Vice-principal for teaching and Learning, College of Science) previously completed training as a PASS supervisor.

This course provides training in a range of techniques to enable supervisors to train students in peer assisted study techniques. PASS utilises the experience and expertise of higher year volunteer students (PASS Leaders) by training them as facilitators, not teachers or tutors.

They support their group of lower year students in finding solutions to their problems themselves, through facilitated discussion and guided questioning. Each group’s PASS leader encourages active learning in an informal and friendly environment providing an opportunity for students to enter into discussion with their peers. Dr Kathy O’Boyle has applied some of the techniques in training 2nd year peer mentors and it is hoped that the training will be rolled out on a broader basis within the school.

In a separate development, Drs Tara McMorrow and Craig Slattery were awarded a Professional Diploma in University Teaching and Learning.

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An image submitted by SBBS PI Dr Breandán Kennedy was amongst twelve shortlisted entries in the UCD Images of Research 2013 Competition.

The image from the Kennedy laboratory is taken through the eye of a zebrafish showing the neurons in the retina that enable us to see colour. This disease model is used to study blindness resulting from the loss of colour photoreceptors. The research team use it to study the disease and potential gene and drug therapies. Since the competition was started in 2006, there have been over 1640 entries from staff and students of all levels. The aim is to find the most innovative and imaginative research images that convey the depth and range of research taking place at UCD.

RIGHT “Finding colour in a Black and White World”, shortlisted entry in the UCD Images of Research Competition (Image, B Kennedy)
Alyson Murray, a postgraduate student in Dr Jennifer Mitchell’s group was awarded second place in the Howard Dalton Awards at the Society for General Microbiology (SGM) Annual Conference in September

Alyson was awarded first prize for her oral presentation “Bacterial Lipoteichoic acid interacts with the Human platelet Membrane receptor CD36” at the SGM Irish Division Spring conference in March 2013 and went on to represent the Irish division at the main SGM conference which was held at the University of Sussex. The prize recognises and rewards excellence in science communication by a society member who is a postgraduate student or postdoctoral researcher, having gained their PhD in the last two years.

Alyson works on infective endocarditis, an infection of the tissue that lines the inner surface of the heart and which usually involves one or more of the heart valves. Although rare, it is a serious infection that can be life threatening. Those at higher risk include people with certain heart defects, those with a compromised immune system and intravenous drug users who may have bacteria in their blood due to the use of contaminated needles.

On the subject of her research Alyson writes:

“My research is focussed on the adhesion of bacteria to platelets which plays an essential role in the initiation of Infective Endocarditis (IE). IE is a microbial infection of the endocardial surface of the heart. Staphylococcus aureus, Streptococcus mitis and Streptococcus galalyloticus are gram positive bacteria that are leading causes of IE. In our study we demonstrate that CD36 acts as a receptor for bacterial attachment to platelets.

“CD36 is an 88kDa glycoprotein of the scavenger receptor family that has been shown to act as a co-receptor for LTA with TLR-2 in the immune recognition of bacterial lipoteichoic acid (LTA). It is found on a number of cell surfaces including macrophages, endothelial cells as well as platelets. We were able to demonstrate that clinical strains of Staphylococcus aureus, Streptococcus mitis and Streptococcus galalyloticus all directly interacted with platelet CD36. We also identified the minimum binding region of CD36 for these strains as amino acid 118-182 using purified recombinant CD36 truncates and protein binding assays. We were also able to demonstrate that two lysine residues within this region, lysines 164 and 166, were essential for bacterial binding.

“Following this we confirmed that Lipoteichoic acid (LTA) promotes the attachment of these bacteria to both platelets and CD36 protein. We could also show that LTA binds to lysines residues 164 and 166 within CD36 using direct binding assays blocking with free LTA and antibodies to LTA. Finally, in order to confirm the role of LTA in CD36 and platelet binding we analysed the effect of an ItaS deletion mutant of S. aureus on platelet and CD36 binding. The S. aureus ΔItaS exhibits a decreased level of binding to platelets and CD36 that is restored upon complementation of ItaS.”

Fledgling spin out company BlackLabBio to be launched

BlackLabBio is a new spin out company from UCD headed by SBBS Principal Investigator Dr David O’Connell. BlackLabBio are in a position to launch their first product on the market.

Dr O’Connell’s expertise is in the area of protein engineering and the company plans to develop technologies in this field which will be attractive to large biopharmaceutical companies. “We have developed a patented technology in the protein engineering space that can potentially save producers a lot of money” Dr O’Connell says. “They face steep production costs associated with highly complex manufacturing processes so any innovative technology that cuts costs is of major benefit to them.”

BlackLabBio is in the stage of developing its first product, Protein Retriever Pro, which is a kit for rapid and simple purification of pure native protein. It is essentially a mini-prep for proteins. The company has an application in discussion with Enterprise Ireland to launch both the company and the product. The global biopharmaceutical company, Astra Zeneca are testing the purification technology in Sweden. In addition, Silicon Kinetics, an American biosensor company are currently evaluating the technology in their labs in San Diego with a view to negotiating a licence deal for this field of applications. The company and products were showcased at the recent Protein Engineering Summit in Lisbon, 4-8 November (http://www.pegsummiteurope.com/).

The company will employ three people initially and in the longer term plans to provide a significant number of high calibre jobs. BlackLabBio is based in the UCD Conway Institute.

Staff and Student News

Professor Ciaran Regan has been invited to join the advisory board of a project to investigate the relationship between Intoxicants and Early Modernity: England, c. 1580 to c. 1740. The research team is based at the University of Sheffield and the Victoria and Albert Museum, London.

www.ucd.ie/sbbs
The Butler lab says goodbye (for a while) to Dr Linda Holland, who obtained a Marie Curie Elevate Fellowship and leaves for the University of Melbourne on December 15th. They hope to welcome Linda back in 2016. Meanwhile, the group welcomes Dr Stephen Hammell (from NUIM), Ms Siobhan Turner (from TCD) and Kontxi Mtz. de San Vicente (from Spain).

Dr Cormac Murphy welcomes two new PhD students to his group. They are Laura Quinn and Radwan BaAbbadi.

Kevin O’Connor gave an invited presentation at The European Symposium BioPolymer (ESBP) in Lisbon October 8 entitled “Application of monomers derived from Biodegradable polymers”.

Federico Cerrone from Dr O’Connor’s group attended BIOPOL in Rome Oct 1-3 and presented a poster entitled “Conversion of lignocellulosic biomass to a biodegradable polymer”.

Dr Kevin O’Connor’s group welcomes two new PhD students. Carolina RuizL is being funded by a Brazilian Ireland Programme (CAPES) to study the conversion of waste to biodegradable polymers. Meanwhile the Saudi Arabian government is funding PhD student Sarah Almahboub on the engineering of proteins to develop bio catalytic routes to unnatural amino acids.

PhD students in Computational Infection Biology and in the Bioinformatics and Systems Biology PhD programmes organised their annual PhD symposium “Computational Biology and Innovation” on 5th December. Keynote speakers included Professor John Quackenbush, Professor of Computational Biology and Bioinformatics, School of Public Health, Harvard, Professor Tom Blundell, University of Cambridge and Dr Richard Durbin, Joint Head of Human Genetics and Head of Computational Genomics, Sanger Institute.

A mini-symposium took place in November to celebrate 5 years of the Infection Biology Thematic PhD programme with presentations on infectious disease from both human and animal perspectives. The Infection Biology thematic PhD programme is delivered by three UCD schools: the School of Biomolecular and Biomedical Science, the School of Medicine and Medical Science and the School of Veterinary Medicine.

The school wishes Kasia Sawicka well on her secondment to the Smurfit School of Business and welcomes Tasmaen Fili. who has joined the SBBS administrative team. Tasmaen will be based in the School’s Undergraduate Office.

Dr Cormac Murphy together with Professor Eoin Casey from the School of Chemical and Bioprocess Engineering, hosted a Workshop on Catalytic Biofilms on November 13th with attendees from University of Birmingham, University of St Andrews and TU Dortmund. The workshop was funded by the UCD Seed Funding scheme.

Dr Cormac Murphy , SBBS (third from right) and Professor Eoin Casey School of Chemical and Bioprocess Engineering with attendees at the Workshop on Catalytic Biofilms

Upcoming Events

ENGAGE-Merville Seminars This is a re-establishment of the popular Merville Lay Seminars/Access Science event which will give PhD students an opportunity to present their own PhD research to a general, non-scientific audience. The Grand Final will take place 12th March 2014 in the George Moore Auditorium, Science Centre East.

Recent SBBS Publications


This newsletter is put together with the help of staff and students in SBBS. Research news, general school news and other items of interest for inclusion in this newsletter or on the SBBS website can be sent to heather.wood@ucd.ie