

Issue

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Professor José Bengoechea
Centre Director

Welcome

It is a great pleasure to bring you the new edition of the Centre's newsletter. There have been several highlights; another successful summer student programme introducing the research we do at the Centre to the future biomedical leaders, a great PDRA symposium, the inaugural Northern Ireland Cystic Fibrosis Conference, and the British Association for Lung Research meeting...all these events reflect our commitment to engage with the community and key stakeholders to promote our research and to seek new opportunities.

However, I am particularly proud of the stellar performance of our staff. Four of our postgraduates were recognized in the School of Medicine Postgraduate Research Forum; and Dr Denise Fitzgerald was the recipient of the Vice Chancellor's Research Innovation Prize and, just last week, the Queen's University Staff Leadership Award. These recognitions exemplify our commitment to making a difference through excellent research. I take this opportunity to invite you to visit our Centre on Saturday 17th February and enjoy the activities we have prepared for this year's Northern Ireland Science Festival.



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Meet our Researchers



Prof Bronagh Blackwood

Bronagh's career has spanned 38 years and began in clinical practice as a registered general nurse and since then has taken a lot of twists and turns. She worked clinically in Northern Ireland and Germany in critical care areas. Then she entered the clinical education and research field before eventually ending up at Queens as one of the founding members of staff in the School of Nursing and Midwifery in 1995. Bronagh's PhD was awarded by Kings College London in 2005. In 2012 she moved to the Centre for Infection and Immunity, now CEM. Her research focuses mainly on the impact of mechanical ventilation and clinical interventions to improve outcomes for ICU patients. Her work, therefore, focuses on the translation of evidence into bed-side practice and encouraging its uptake.



Dr Damian Downey

Damian qualified in medicine from QUB and his early clinical training and airway inflammation research was carried out in Belfast. He undertook specialist respiratory training in Manchester and Brisbane and, in 2006, was appointed as a cystic fibrosis (CF) consultant in Bristol. Damian returned to Belfast in 2011 to co-direct the N Ireland Regional Adult CF Centre before moving to his current role as a Clinical Senior Lecturer in 2017. His research interests remain in chronic lung disease, specifically CF and bronchiectasis. He is exploring how we treat pulmonary exacerbations and identify clinical and biomarker signatures that will predict outcome. Damian also leads a CF Clinical trial program and is a Chief Investigator on a number of pivotal new drugs in CF and Co-Director of the European Clinical Trials Network for CF.



Dr Andriana Margariti

Andriana completed her PhD on Cardiovascular medicine in King's College London in 2008. Her postdoctoral training was in the Cardiovascular Division of the BHF Centre of Excellence at King's College London (KCL). In 2013 she was appointed as a Lecturer in CEM and promoted to Senior Lecturer in 2017, where she is leading the facilities of induced pluripotent stem cells in CEM. Andriana's research program is based on the remarkable approach of cell reprogramming which will allow us to establish homogeneous populations of endothelial cells and develop effective treatments for cardiovascular disease and diabetes. Her research demonstrates the therapeutic potential of "re-born" reprogrammed endothelial cells which could have transforming consequences for regenerative and personalised medicine.



Dr Lorcan McGarvey

Lorcan graduated with Honours in Medicine and trained in General Internal and Respiratory Medicine. He is a Consultant Respiratory Physician and Clinical Reader in CEM. He is internationally known for his research in cough and has undertaken a range of research studies from evaluation of diagnostic protocols relevant to clinical practice to mechanistic studies designed to elucidate the pathogenesis of chronic cough. His current research is focussed on ion channels and neuro-inflammatory mechanisms in the airways. Lorcan established and leads the NI Specialist Cough Clinic which provides the opportunity for patients to participate in a number of pivotal Phase II national and International clinical trials of novel therapies for cough. He has also worked extensively in the area of chronic obstructive pulmonary disease (COPD) and is Joint Clinical Lead for the NI Clinical Research Network for Respiratory Health.

Awards and Prizes



Dr Denise Fitzgerald (L) is pictured receiving her Research Innovation award from Acting President and Vice-Chancellor Professor James McElroy

CEM academic recognised in recent Vice-Chancellor's Research Prizes & Staff Excellence Awards

Dr Denise Fitzgerald was the recipient of the Vice-Chancellor's Research Innovation Prize at the Great Hall on Monday, 4 December. Denise joined the School of Medicine, Dentistry and Biomedical Sciences in 2009. Since then she has successfully established a cutting-edge research programme in Neuroimmunology, which has opened new frontiers in the fields of neuroscience, immunology and regenerative medicine.

Denise was also the recipient of the Outstanding Leadership Award at the Staff Excellence Awards, which took place at the Whitla Hall on Friday, 9 February 2018, in recognition of her commitment to Postdoctoral development within Queen's. She has successfully established a new Postdoctoral Initiative to enhance and diversify postdoctoral career development and was instrumental in the creation of the Faculty Postdoctoral Development Centre.

Prize Winning Research Presentations for CEM Researchers

Congratulations to **Dr Karla O'Neill** and **Eleanor Gill** who were awarded the best oral presentation and best poster presentation prize, respectively, at the Scottish Cardiovascular Forum annual conference held at Trinity College Dublin on Saturday 3 February 2018.



Pictured (L-R): Sarah Stewart, Lena Glaser, Dr Derek Brazil and Ivan Kwek at the Annual Summer Student Research Symposium

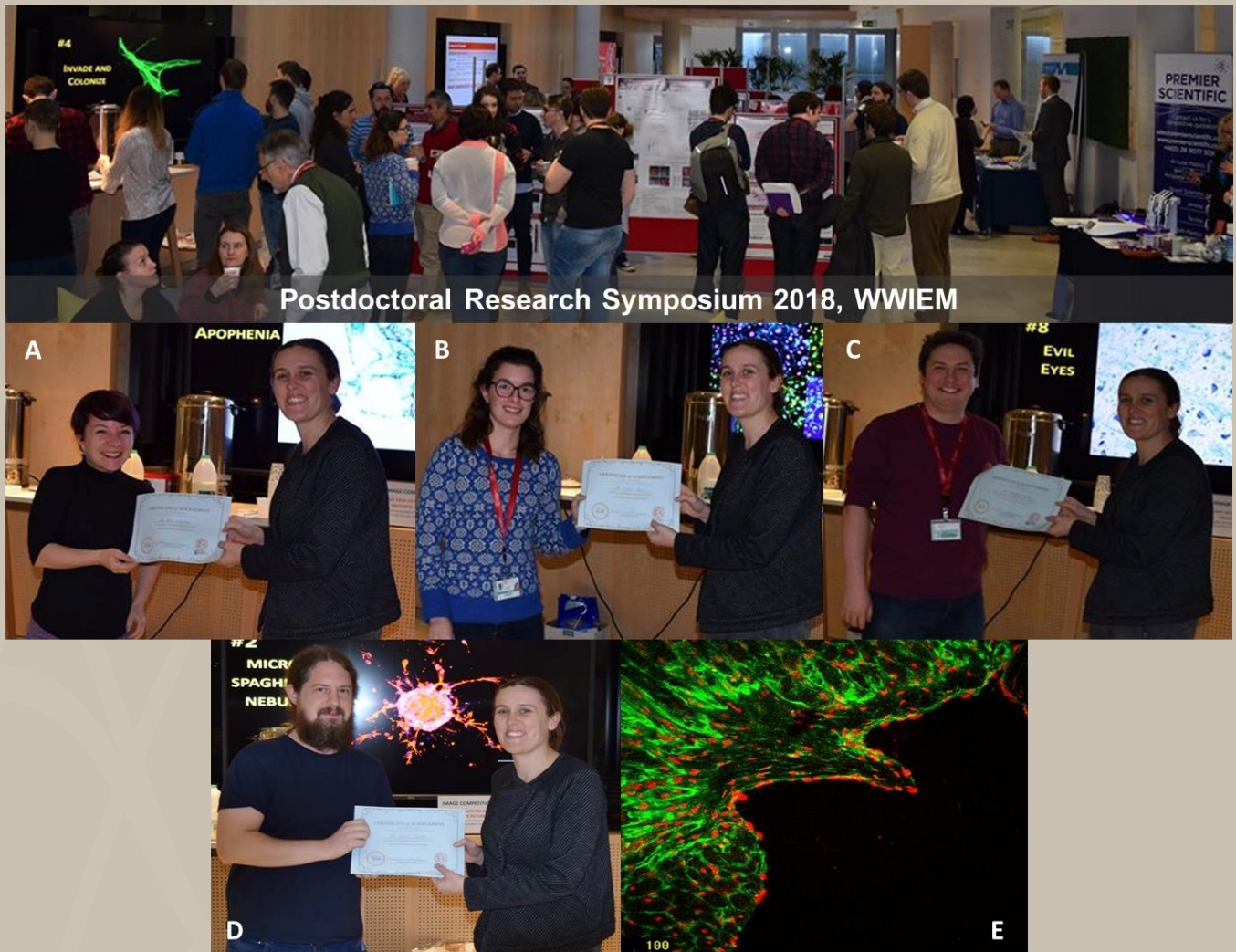
2017 CEM Summer Student Research Symposium

Our 2017 Summer Student Programme concluded at the Annual Summer Student Research Symposium on Wednesday 9 August. Well done to everyone who presented on the day and congratulations to the prize winners; **Ivan Kwek** (Brazil Lab), **Lena Glaser** (Valvano Lab) and **Sarah Stewart** (Curtis Lab).

Awards and Prizes

CEM PhD students' success at SMDBS Postgraduate Education and Research Forum

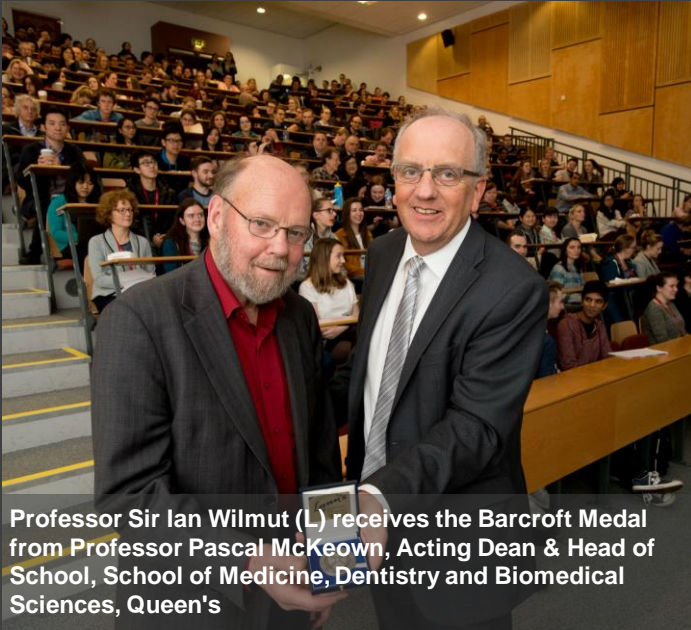
The annual SMDBS Postgraduate Education and Research Forum took place on Friday 1 December 2017 at Riddel Hall. The Forum featured a series of poster and oral presentations from PhD students from research centres across the School. Congratulations to the CEM prize winners for Best Oral Presentations: **Ciara O'Donnell** and **Michael O'Hare** and Runner-Up Poster Prize recipients: **Patricia Coulter** and **Eleanor Gill**.



Postdoctoral Research Symposium 2018

CEM's second Annual Postdoctoral Research Symposium took place on 26 January 2018 in WWIEM. The symposium was organised by **Drs Anna Krasnodembskaya, Peter Barabas, Amy Dumigan** and **Jose Romero** on behalf of the Postdoctoral Development Committee. In addition to an outstanding keynote talk by Dr Darcy Wagner from Lund University, Sweden, on bioengineering approaches for lung diseases, this year's event also featured a talk by **Dr Alice Dubois** in her new role as Head of the Postdoctoral Development Centre.

Prizes were awarded to **Dr Amy Dumigan** for the Best Oral Presentation (A), **Drs Joana Melor** (B) and **Andrew Young** (C) for Best Poster and to **Dr Kevin Edgar** (D) for his winning image entitled "Phoenix from the Annulus" (E). It was a great day of science and socialising within the Centre and we are already looking forward to 2019!



Barcroft Lecture 2017

Professor Sir Ian Wilmut, who led the research team at the Roslin Institute in Edinburgh University that produced Dolly, the first mammal to be cloned from an adult cell, was in QUB recently to deliver the Barcroft Lecture in the School of Medicine, Dentistry and Biomedical Sciences. Professor Wilmut spoke to a packed audience of more than 300 staff and students about the history of cloning and the need to ensure that patients can access the benefits of new technologies emerging from the field. Read more about Professor Wilmut and Dolly's legacy at <http://www.qub.ac.uk/research-centres/CEM/News/BarcroftLecture2017.html>

Northern Ireland Cystic Fibrosis Conference (NICFC) 2017

The 21st November 2017 saw Riddell Hall host the first NI cystic fibrosis (CF) Conference. It was led by **Dr Damian Downey** from CEM and the aim was to bring together, the clinical and research teams, partners from the pharmaceutical industry and representatives from the CF Trust to hear all about our latest research projects. Over 55 attendees engaged with a wide range of topics from basic science to clinical trials. A particular highlight was a patient with CF describe her fascinating journey through life. The NICFC will become an annual event and anybody with a developing interest in CF is encouraged to come along.

China Queen's Students visit CEM

On Wednesday 2 August, ten students from China Queen's College in Shenyang, China visited CEM. Deputy CEM Director **Dr. Adrien Kissenpfennig** welcomed the students, and the hosts, **Drs Lana McClements and Derek Brazil** gave the students a short talk about the Centre and the opportunities to carry out postgraduate Masters and PhD studies in CEM. During a tour of the centre, the CQC students were shown the state-of-the-art imaging facility and the research laboratories. The CQC students then spent some time in individual CEM laboratories learning about the different types of cutting edge research ongoing in CEM. It was a very successful visit and we look forward to hosting CQC students in CEM in the future.



Outreach



Great Ethiopian Run 2017

On November 26th, 46,000 people took to the streets of Addis Ababa for the Great Ethiopian Run (pictured). In the middle, there were 73 **Orbis Ireland** participants, including CEM's **Dr David Simpson**. David took part in the run to help raise money and awareness of sight-threatening diseases. Orbis is an international charity founded to eliminate avoidable blindness in the developing world. Following the run, the group visited the Orbis projects in southern Ethiopia to see first-hand the impact that their support is having in the region.

British Association for Lung Research (BALR) Summer Meeting 2017

On August 30th - September 1st, CEM was the proud host of the 2017 **BALR** Summer Meeting 'Discovery to Recovery: Still Lost in Translation.' The meeting, organised by **Dr Bettina Schock**, brought together leading and early career scientists and clinicians from across the UK, Europe and North America to discuss the latest research and concepts beyond the respiratory system with the overall aim to get 'respiratory research fit for the future.' Congratulations to the winners of the Early Career Scientist (Dr Emma Doran, Genentech Inc., USA) and PhD Student (Jessica Tilman, Imperial College London) competitions, and the Best Poster prize winners; Duncan Humphries (University of Edinburgh), Lareb Dean (Imperial College London), and **Jenny Moi-Fong Lau** (CEM).

£1,300 for cystic fibrosis research at Queen's

Pictured at the handover of the generous donation to **Dr Damian Downey**, Clinical Senior Lecturer, CEM are: (L-R): Fiona and Louise Madden, Dr Downey, Declan, Deirdre and Matthew Madden. The proceeds came from a number of activities to raise funds in memory of Felix Madden, Deirdre's husband, who died last year. Dr Downey and his team will use the gift to fund CF and bronchiectasis research in CEM.



Celebrating European Researchers Night at the Ulster Museum

A number of CEM research groups took part in 'Science Uncovered' which took place in the Ulster Museum on Friday 27 September as part of European Researchers Night. CEM researchers presented short talks and / or demos in areas such as diabetes, the eye, lung damage and disease and multiple sclerosis. The event had over 800 visitors. European Researcher's Night is a Europe-wide initiative, in which thousands of researchers all across Europe meet the public and share their work in a social setting. A short film of the event is available on YouTube at <https://www.youtube.com/watch?v=Fvxv55BiyWg>



Antrim Borough Council Multiple Sclerosis Support Group donates £3,000 towards research

Dr Yvonne Dombrowski and Jill Moffat from the MS Research Cluster, along with Rachel from the Development and Alumni Relations Office, are pictured above receiving the very generous donation for their research.

Raising awareness of Duchenne muscular dystrophy (DMD)

Professor Mike Shields spoke at the **Action Duchenne** Round Table Family Meeting NI at the Clayton Hotel, Belfast on 3 February 2018. Mike discussed how Duchenne affects the respiratory system, and provided an update for patients, families and carers on new treatments and current research. Duchenne is a rare and complex genetic muscle wasting condition, which affects around 1 in 3,500 male births in the UK.



STEM Careers Event

Dr Donna Small represented CEM at the STEM Careers Event: Briefing Lisburn Schools STEM Careers on February 1-2. The event, which was attended by Year 10 students from eight schools in the Lisburn area, highlighted the positives associated with selecting STEM subjects for GCSEs and showcased the interesting careers STEM subjects can lead to.

CEM Postdoctoral Development Committee (PDC)

Over the past 6 months, the PDC has organised and hosted numerous events including a Scientific Writing and Media Careers workshop in conjunction with the Association of British Science Writers (ABSW) on October 19. This interactive workshop featured national science and technology journalists and focussed on how to develop skills and a career in science communication. Recent events also included career development seminars (Stepping into Industry; Making your own Luck), the recent CEM Postdoc Research Symposium (see page 3), and the forthcoming seminar on Tuesday February 20th (Professor Adrian Liston on the Challenges of Being a Scientist and a Parent). The PDC continues to run several support programs including a very successful Buddy Scheme to help new postdocs starting in CEM and a Fellowship Support programme.

Contact us: d.fitzgerald@qub.ac.uk

 QUB CEM Postdocs  QUB CEM Postdocs

Welcome to the Head of the Postdoctoral Development Centre

Congratulations to **Dr Alice Dubois** on her recent appointment as Head of the Postdoctoral Development Centre in the Faculty of Medicine, Health and Life Sciences. We wish Alice the very best of luck in her new position and we look forward to working with her in the future!





Help support the pursuit of world-class education and life-changing research

If you would like to donate to any of the research programmes within CEM, please contact **Alice O'Rawe**, Development Manager (Health), Queen's University Belfast; Tel: (+44) 028 9097 5233; Email: alice.orawe@qub.ac.uk. Alternatively, go to **Queen's Foundation - Donate Now** @ <https://daro.qub.ac.uk/make-a-gift-to-queens>. Within the donation form, you can specify how you would like your gift to be used.

Queen's Foundation have launched a new online fundraising guide for people who would like to raise money directly for CEM. The simple guide provides helpful tips on planning and promoting a fundraising event, using JustGiving and it includes poster / flyer templates and a sponsorship form. Check it out online at @ https://daro.qub.ac.uk/file/QUB_fundraising_Guide.pdf or contact Alice O'Rawe for more information.

