



# Bulletin

December 2017 Issue 40

## DUCHESS OF GLOUCESTER MEETS PROSTATE CANCER PATIENTS AT QUEEN'S CCRCB

Her Royal Highness the Duchess of Gloucester visited the Movember Centre of Excellence based within the Centre for Cancer Research and Cell Biology (CCRCB) at Queen's University Belfast on Friday 22 September 2017 to learn about the ground-breaking prostate cancer research taking place.

The Duchess of Gloucester, who is the royal patron of the men's health charity, Prostate Cancer UK was introduced to patients and researchers leading on revolutionary projects at the Movember Centre of Excellence, one of Prostate Cancer UK's major research programmes.

Professor David Waugh, Director at the Queen's University Centre for Cancer Research and Cell Biology said: "Our mission in the Centre is to translate our scientific discovery to inform how best to treat patients in the clinics. In this regard, our research has a direct impact in improving patient outcomes and their quality-of-life. We are delighted to welcome the Duchess of Gloucester to the Centre and to introduce her to our prostate cancer research team, patients and their families to experience first-hand how our research makes a real difference to people's lives."

Commenting on the visit, Angela Culhane, Chief Executive of Prostate Cancer UK said: "Prostate cancer kills one man every 45 minutes. It's the most common cancer in men and it's set to become the most common cancer of all by 2030. Together with the Movember Foundation we launched the Centres of Excellence programme to bring the best minds in prostate cancer research together in a bid to stop prostate cancer in its tracks and ensure more men survive the disease and continue to lead a good quality of life. The Belfast-Manchester Centre has been making great strides in finding new ways to treat men living with advanced prostate cancer and we're delighted to be showcasing some of this potentially game-changing work to our royal patron, the Duchess of Gloucester."



Her Royal Highness the Duchess of Gloucester with (from left) Dr Suneil Jain, Mr James Greene, Mr David Livingstone, Professor Joe O'Sullivan, Professor David Waugh and Ms Angela Culhane, Chief Executive of Prostate Cancer UK

Queen's University's Professor Joe O'Sullivan has led a clinical trial for men who present with prostate cancer which has spread to the bone. The trial, known as ADRRAD, offers a novel combination of therapies to patients including treatments only available to those on the trial.

Prostate cancer patient, David Livingstone spoke to the Duchess of Gloucester about his involvement in this trial: "If it wasn't for this research, I simply would not be here. On May 2016, I received my diagnosis that I had very aggressive prostate cancer that had spread to the bones. The prognosis was bleak."

David was offered a combination of therapies through the trial, including a high-dose radiotherapy and radium-223. Following the treatment, David has now been told his tumour is 'under control' and says: "He enjoys a good quality of life."

Her Royal Highness the Duchess of Gloucester also met with Dr Suneil Jain, a clinical researcher at Queen's University who is leading the SPORT clinical trial. This trial seeks to improve the use of radiotherapy in men diagnosed with high risk prostate cancer.

Dr Jain explained how the trial works: "One of the potential complications from using radiotherapy is the potential damage that can be inflicted on neighbouring tissues. In this trial, we are evaluating the performance of a biological spacer which is inserted between the prostate gland and the lower spine of the patient. This creates a greater distance between the prostate tumour and other tissues, enabling us to concentrate the radiotherapy dosage provided to the tumour and thus reducing the chance of radiation harming other tissues close to the tumour such as the bowel."

James Greene was the sixth person to take part in this research trial which is only available to patients in Northern Ireland. James said: "Taking part in this trial meant I was offered a high-dose five treatment course instead of enduring three months of treatment."

"The treatment was really successful in getting rid of the tumour. I even recently ran a 10k marathon to fundraise for the life-saving research taking place at CCRCB along with my two sons, Dr Jain and his wife so that more patients can benefit from this work."

# QUEEN'S CANCER PROFESSOR HIGHLIGHTS THE NEED FOR CANCER RESEARCH AND NATIONAL CANCER CONTROL PLANS IN EASTERN EUROPE



Professor Mark Lawler, Centre for Cancer Research and Cell Biology, Queen's University Belfast, gave the keynote address at the recent 8<sup>th</sup> Regional Oncology Forum in Warsaw, Poland. The Forum was attended by over 300 Oncologists and cancer health care professionals from the region, which encompasses Eastern Europe and the Confederation of Independent States (CIS). In his address, Professor Lawler highlighted the inequalities that cancer patients face in Eastern Europe and the CIS, which are leading

to significantly poorer survival figures in this region. He also highlighted that only ~50% of countries in the region had a viable National Cancer Control Plan. He emphasised the need for cancer research in Eastern Europe and the CIS to be enhanced and outlined how a research informed cancer control plan can improve cancer outcomes. Professor Lawler and Professor Richard Sullivan (Kings College London) are leading a research mapping and cancer control project in Eastern Europe and the CIS.

Professor Lawler also participated in a special symposium and round table discussion with over 40 journalists from across Eastern Europe and the CIS, highlighting the policy issues that must be addressed and the role of the media in positively influencing changes in cancer policy at national level. A series of interviews and articles were published in media across Eastern Europe and the CIS, highlighting the importance that the media placed on addressing cancer policy issues.

# QUEEN'S CANCER PROFESSOR LEADS PATIENT ADVOCACY DRIVE IN EASTERN EUROPE

Professor Mark Lawler, Centre for Cancer Research and Cell Biology, Queen's University Belfast, was a keynote speaker at an Eastern European Patient Advocacy Forum which took place in Vienna, Austria, in September 2017. Patient advocates from across Eastern Europe and the Confederation of Independent States (CIS) heard Professor Lawler speak about cancer inequalities in the region and the role of the European Cancer Concord and European Cancer Patient's Bill of Rights (which Professor Lawler launched in the European Parliament on World Cancer Day 2014) in effecting change. In his address, Professor Lawler highlighted the 70:35 Vision that the European Cancer Concord has developed, which aims to achieve 70% survival for cancer patients across Europe by 2035. This Forum is one of a series of events and activities that Professor Lawler is leading, in order to better inform patient's advocates of the role that they can play in addressing cancer issues, and to catalyse their actions in combating cancer inequalities in their own countries.



Professor Mark Lawler (second right) at the Eastern European Patient Advocacy Forum

# £800K BOOST FOR BELFAST SCIENTISTS TO IMPROVE BOWEL CANCER TREATMENT



Professor Daniel Longley

Scientists in Belfast are set to receive over £800,000 to find ways to improve treatment for people with bowel cancer that could help more people survive the disease.

Professor Daniel Longley, Professor Mark Lawler, Dr Simon McDade, Dr Philip Dunne, Dr Darragh McArt, Dr Helen Coleman and Dr Adrien Kissenpfennig at Queen's University Belfast have been awarded a prestigious Programme Award by leading charity Cancer Research UK to carry out the ground-breaking research. The research is supported by the Bobby Moore Fund for Cancer Research UK, which funds world class research that has the potential to make the greatest impact in making sure more people survive bowel cancer.

The scientists will use the funding to examine tumour samples from patients to try and understand why chemotherapy works for some bowel cancer patients but not others. Every year, around 1,200 people are diagnosed with bowel cancer in Northern Ireland, and around 420 people die from the disease.

Professor Longley said: "Patients diagnosed with stage II or stage III bowel cancer are usually treated with surgery followed by chemotherapy. But unfortunately, chemotherapy doesn't improve survival for all of these patients. We want to study the underlying biology of tumours from bowel cancer patients who fail to respond to chemotherapy, to understand why treatment doesn't work for them. By doing this we hope to find new ways to identify those patients who are unlikely to benefit from chemotherapy and to determine which other treatments could work best for them."

In particular, Professor Longley and his team will look at whether some of this group of patients could benefit from being treated with immunotherapy drugs.

He continued: "For some people with bowel cancer, we believe the power of the immune system could be harnessed to kill the tumour. Some bowel tumours contain large amounts of a protein called PD-L1 which can help them escape detection and destruction by the immune system. We want to see if using immunotherapies that target PD-L1 – either on their own or in combination with chemotherapy and other new drugs – could potentially help the immune system kill the tumour and improve survival for those bowel cancer patients that don't benefit from chemotherapy."

The ground-breaking project will continue research begun by the late Professor Patrick Johnston, who was Vice-Chancellor of Queen's University Belfast and one of the world's leading cancer researchers.

Professor Johnston, who is said to have put Belfast cancer research on the map, applied together with Professor Longley for funding for the project before his sudden and untimely death in June this year.

Professor Longley said: "Paddy laid the foundations for cancer research in Northern Ireland, and for bringing cancer treatment up to date in our hospitals. It's a great pity he won't be here to see the outcomes of this project. However, he leaves behind a tremendous legacy and with it, a tremendous responsibility for us to fulfil his vision to improve survival for bowel cancer patients. It's the best tribute we can pay to him to try our hardest to do so."

Cancer Research UK Programme Awards provide long-term support to scientists to carry out research that will help them better understand cancer and bring benefits to cancer patients.

Matt Kaiser, Cancer Research UK's head of discovery research, said: "This research

by Professor Longley and his team aims to optimise current treatments and help doctors provide more tailored treatment plans for bowel cancer patients. This work will build on Professor Johnston's phenomenal legacy in precision medicine – which Cancer Research UK has supported for many years through our Programme Awards – helping to get the best treatments to patients sooner and sparing them unnecessary side effects."

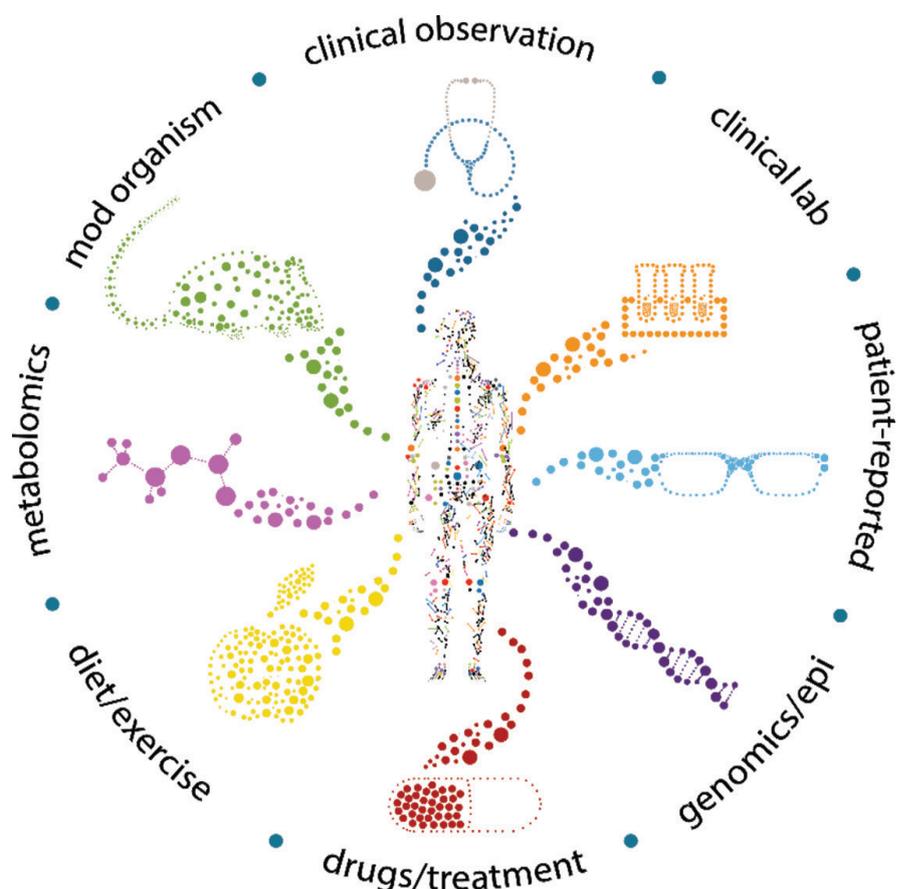
Jean Walsh, Cancer Research UK's spokesperson in Northern Ireland, said: "This award is recognition of the fantastic research taking place in Belfast. One in two of us in the UK will be diagnosed with cancer at some stage in our lives, but the good news is more people are surviving the disease now than ever before. Cancer survival in the UK has doubled since the early 1970s and Cancer Research UK's work has been at the heart of that progress."

A legacy of the late Professor Patrick Johnston of Northern Ireland, one of the world's leading cancer researchers.

# BIG DATA CAN SAVE CANCER PATIENT'S LIVES SAYS QUEEN'S PROFESSOR

We live in a world where data is being generated at an exponential rate, particularly in relation to human health. Queen's researchers are making significant inroads into converting this data into valuable information that can help on our fight against cancer.

Speaking at the International Forum on Cancer Patient Empowerment in Milan, Professor Mark Lawler, Centre for Cancer Research and Cell Biology, Queen's University Belfast, highlighted how a personalised health agenda can help drive improved outcomes for cancer patients. He specifically focussed on the role that Big Data can play in improving human health and highlighted the importance of sharing genomic and clinical data to improve cancer outcomes, drawing on his recently published paper in the *New England Journal of Medicine* (the premier medical journal in the world). This work was performed with the Global Alliance for Genomics and Health, a worldwide organisation dedicated to the responsible and effective sharing of clinical, genomic and epidemiological information, with particular focus on rare diseases and cancer. "It is clear that we need to move away from the closed Selfish Silo approach of hoarding this data (much of which has been generated through public funding) and move towards a collaborative open source data cooperative," said Professor Lawler. "Our Call to Action aims to energise the scientific, clinical, epidemiological and policy communities to support our cancer knowledge network, which we feel will have a significant impact on improving human health."



## CULTURE NIGHT BELFAST STEP RIGHT UP AND KNOCK CANCER DOWN

Cancer Research UK in partnership with The Centre of Excellence for Public Health Northern Ireland and researchers from CCRCB rolled up to City Hall with their Carnival for a Cure to take part in the annual event Culture Night, Belfast on Friday 22 September 2017.

Over 100,000 visitors attended Culture Night which is now in its ninth year and has over 300 different events happening over one evening.

Visitors to the stand could take part in various interactive activities which allows them to find out more about the ground-breaking cancer research taking place in Belfast. From playing 'Tower of Risks' to learn about lifestyle factors related to cancer, or 'Hook a Duck' and find out about personalised medicine or you could add your unique thumbprint to our DNA Helix.



## CANCER RESEARCH UK PRETTY MUDDY 2017 EVENT

On 2 September 2017, nearly 2,000 women put on their pink clothes and prepared to get muddy by taking on the 5k Pretty Muddy Obstacle Course in Ormeau Park to raise nearly £100k for Cancer Research UK. They were helped through the obstacles and across the finish line by a team of research volunteers from CCRCB. Making his second appearance providing the finish line commentary was PhD student Aidan Seeley who entertained and congratulated each of the participants over the line. Thanks to everyone who gave up their time that morning and got involved.



## TRIAL TO TEST NEW DRUG IN PATIENTS WITH ADVANCED CANCER

A clinical trial to test a new cancer drug in patients with advanced solid tumours was launched in four centres across the UK, through Cancer Research UK's Centre for Drug Development. This early phase trial will test the safety and tolerability of the drug and establish the recommended dose for patients with a variety of cancers including advanced bowel, lung, ovarian, urothelial, pancreatic, breast, head and neck, and oesophageal cancer.

In the first part of the trial, groups of patients will receive increasing doses of the drug, called LY3143921 hydrate, to find the safest dose that best targets the cancer cells. The drug, discovered by Eli Lilly, was brought to Cancer Research UK through the charity's Clinical Development Partnership scheme.

In the second part, larger groups of patients will receive the highest tolerated dose, so that researchers can investigate how the drug is working on the cancer cells. The drug has not yet been tested in people but has shown promise in mice by selectively inhibiting Cdc7, a protein that helps cells to reproduce correctly.

Cancer cells are more dependent on Cdc7 than normal cells, causing them to be more sensitive to growth inhibition by this Cdc7 inhibitor. Researchers also believe that cancers that have a particular fault in their p53 gene may be particularly sensitive to inhibition of Cdc7. This study will focus on metastatic bowel cancer, squamous non-small cell lung cancer and high grade serous ovarian cancer, all of which have high levels of p53 mutation and functional loss.

They will also investigate other tumours with reported higher levels of p53 loss or mutation including squamous carcinoma of the oesophagus, squamous carcinoma of the head and neck (Human Papilloma Virus negative), urothelial cancer, triple negative breast cancer and pancreatic cancer. The drug will be delivered orally once a day for 21 days and this cycle will then be repeated up to 12 times.

Professor Richard Wilson, Cancer Research UK funded clinical researcher and chief investigator at the Northern Ireland Cancer Centre, said: "We hope that this new cancer drug might in the future provide patients who have tried all available treatment options another opportunity to stop their cancer cells from multiplying and control their disease. It's very early days, but this trial will help us to understand whether this drug could help cancer patients and whether it has the potential to stop the growth of many different cancer types, particularly those with loss of p53 function."

Dr Nigel Blackburn, Cancer Research UK's Director of Drug Development, said: "Finding new ways to tackle hard to treat cancers is a crucially important area of research and a priority for Cancer Research UK. At our Centre for Drug Development, we work across the academic, pharmaceutical and biotechnology sectors to bring much needed new treatments to cancer patients. New drugs like this one to treat advanced types of cancer are vital to ensure three in four people survive their disease by 2035."

We hope that this new cancer drug might – in the future – provide patients who have tried all available treatment options another opportunity to stop their cancer cells from multiplying and control their disease.

## EUROCLONALITY-NGS COMES TO BELFAST



*EuroClonality-NGS consortium in Belfast*

Belfast welcomed the EuroClonality-NGS working group to our city from 4–6 October 2017. EuroClonality-NGS is a European lead consortium that utilizes Next Generation Sequencing in the diagnosis, minimal residual disease detection and repertoire analysis in Haematological malignancies. The EuroClonality-NGS meeting was organised by Professors Ken Mills, David Gonzalez de Castro and Dr Mark Catherwood (Belfast City Hospital) and included approximately 50 participants from over 7 European countries. Considerable discussion

revolved around this rapidly expanding area of molecular diagnostics with Professor Gonzalez de Castro's group leading a unique workpackage that is set to overhaul molecular diagnostics in Haematological malignancies.

Whilst in Belfast the EuroClonality-NGS group were treated to a city site seeing tour and an evening meal at the impressive Crumlin Road Gaol. As all participants returned to their native countries many vowed to return for both work and extracurricular activities!



## LEUKAEMIA & LYMPHOMA NI FUND UNIQUE CLINICAL FELLOWSHIP IN SOUTHAMPTON

Despite being traditionally research based, Leukaemia & Lymphoma NI have recently been branching out into clinical support to strengthen the bench to bedside links here in Northern Ireland.

There is significant evidence to suggest that patients who take part in clinical trials do tend to benefit from better results regardless of the success of the drug. This can be attributed to being more closely monitored by a clinical nurse and other benefits of group therapy. Subsequently it's vital that patients in Northern Ireland are provided with the important opportunity to be part of UK trials and state of the art treatments.

In January 2016, Leukaemia & Lymphoma NI worked alongside Belfast City Hospital to support a clinical trial for Acute Myeloid Leukaemia, following on from this they worked with Myeloma UK to co-fund a Clinical Trials Nurse, the appointee Ruth Irwin who took up a post in Belfast last October. It's hoped that the success of the trial and the recruitment of a specialist nurse has made Belfast a more attractive host centre for new experimental treatments.

Leukaemia & Lymphoma NI's efforts to improve Clinical Trials access have now branched into specialist training; Dr Bridgin Merron has recently completed her haematology training and will now spend the next year at Southampton University as she completes a Clinical Trials Fellowship. This is a fantastic opportunity and Dr Merron has taken this post with a view to returning to Northern Ireland with new skills and experience which will expand and develop the clinical trials portfolio in Northern Ireland for haematology patients.

Leukaemia & Lymphoma NI have co-funded Dr Merron's Fellowship along with Southampton University, this is an extremely well respected campus which hosts an Experimental Cancer Medicine Centre and a Clinical Trials Unit.

During her Fellowship Dr Merron will be under the supervision of Professor Peter Johnson. Professor Johnson specialises in the treatment of lymphoma, and is the Chief Investigator for several lymphoma trials both nationally and internationally.



*Dr Bridgin Merron*

## DONATIONS



### LISBURN NIGHT AT THE RACES SUPPORTS QUEEN'S CANCER RESEARCH

Supporting cancer research at the Centre for Cancer Research and Cell Biology (CCRCB) at Queen's University Belfast are: Ms Anne Crothers (left), with Dr Gerry Hanna (centre) and her brother Mr Sam Moulds.

Dr Hanna, who is a Clinical Senior Lecturer in the School of Medicine, Dentistry and Biomedical Sciences at Queen's specialises in lung cancer research in CCRCB. The gift of just over £1,000 was the proceeds from a Night at the Races organised recently by Mr Moulds and Ms Crothers.



### SUPPORTING CANCER RESEARCH – FOR THE LOVE OF AMY

Supporting cancer research at the Centre for Cancer Research and Cell Biology (CCRCB) at Queen's University are Ms Jean Reid (left), Miss Emma Reid (right) and Mr Mark Reid (2<sup>nd</sup> from right), with Professor Kevin Prise (Deputy Director of the Centre for Cancer Research and Cell Biology).

The latest proceeds (£3,000) came from various music activities organised in Newtownards and around County Down by the Love Amy charity. The group was set up by the Reid family in memory of their daughter/sister Amy who died in February 2013 aged 20 years old. To date, over £6,000 has been donated by the Reid family via the Queen's University Foundation to CCRCB for cancer research.

## GLOBAL STUDY IN PROSTATE CANCER

Dr Gillian Prue, School of Nursing and Midwifery, along with academic clinical oncologists Professor Joe O'Sullivan and Dr Suneil Jain (Centre for Cancer Research and Cell Biology) have been awarded funding from the Movember Foundation and the HSC PHA Research and Development Division to test exercise as medicine and to better understand its role in prostate cancer progression. "INTense Exercise for survival among men with Metastatic Castration Resistant Prostate Cancer (INTERVAL-MCRPC)" is a global trial developed by the Movember Foundation and involves researchers from across the world (<https://uk.movember.com/programs/inactivity>).

INTERVAL-MCRPC is the first clinical trial to attempt to prove that exercise can delay prostate cancer progression, maximising survival and reducing symptom burden. The

primary objective of the study is to determine if high intensity aerobic and resistance training plus psychosocial support increases overall survival compared to psychosocial support alone in patients with advanced prostate cancer. It will also determine the molecular mechanisms underpinning the beneficial effects of exercise in men with advanced disease. The study aims to recruit 866 men from many different countries, including Australia, the US, Canada, the UK and Ireland, and will take over 5 years to complete.

As well as contributing to the global trial, with additional funding from HSC PHA Research and Development Office, the QUB team in collaboration with exercise physiologists from Ulster University, will conduct a local study to provide evidence on the feasibility of exercise interventions for men with advanced prostate cancer for whom high intensity exercise is

not suitable. This will offer the benefits of participating in a multicomponent physical activity programme to those men with MCRPC who are ineligible for the INTERVAL programme i.e. high intensity exercise. This is the first of its kind in this advanced and unwell population, providing preliminary evidence on the acceptability, feasibility and efficacy of moderate intensity physical activity among men with very advanced cancer, and setting the benchmark for all other cancer patients.

The global study will attempt to definitively prove that exercise helps men with prostate cancer live longer and also reduces the symptom burden of prostate cancer. This could lead to exercise being prescribed as a treatment for prostate cancer alongside the traditional treatments such as surgery and radiotherapy.

# QUEEN'S UNIVERSITY BELFAST LEADS LARGEST STUDY OF ITS KIND TO TRANSFORM DIAGNOSIS OF PROSTATE CANCER PATIENTS

Queen's University Belfast have led the world's largest research study using prostate biopsies in men treated with radiotherapy for prostate cancer, using a diagnostic test developed by Almac Diagnostics, to better understand the biology of prostate cancer tumours, which could lead to a transformation in how prostate cancer is diagnosed and treated.

Whether a prostate cancer patient has a slow-growing or aggressive tumour will affect the type of treatment required. It is only through understanding the type and genetics of the particular cancer tumour that clinicians will be able to put an effective treatment plan in place.

Lead researcher, Dr Suneil Jain from the Centre for Cancer Research and Cell Biology at Queen's University Belfast explains: "Current diagnosis of prostate cancer involves biopsies, scans and blood tests to determine how aggressive the cancer is and subsequently to develop an appropriate treatment plan. Doctors repeatedly report that these tools aren't always effective in determining how aggressive the cancer is, which can mean it is difficult to decide on the best treatment for an individual patient."

Pharmaceutical and biotech company Almac have developed a gene expression biomarker, known as Metastatic Assay, which aims to quickly diagnose the type of prostate cancer. The test analyses the genetics of the tumour enabling clinicians to understand the type of tumour, whether it is slow-growing or aggressive and if the latter, to what extent.

Researchers at Queen's University Belfast led a study, using Metastatic Assay on biopsies from 248 patients who had previously been treated for prostate cancer. The research findings, published in *Annals of Oncology*, found the diagnostic test to be more effective than the standard clinical tests.

Professor Richard Kennedy, Global VP and Medical Director at Almac Diagnostics and McClay Professor in Medical Oncology at Queen's University Belfast commented: "We are delighted with the outcome of this study, which further proves the utility of this test in enabling clinicians to select the most appropriate therapy for their patients earlier in the care pathway. This research study has proven the test to be more effective than the current processes used by clinicians to establish the severity of the tumour and this test could lead to the transformation of how we diagnose and treat prostate cancer patients."

Treatment options available to prostate cancer patients include radiotherapy, chemotherapy, brachytherapy and hormone therapy. Although radiotherapy is often used to effectively treat patients with prostate cancer, 20–30% of patients can relapse within five years. Dr Jain explains: "The relapse of many prostate patients could be avoided through undergoing more intensive treatment including higher dosages of radiotherapy. There are also potential side-effects associated with administering more intensive treatment a test that enables us to deliver the right treatment to the right patient would be extremely beneficial in clinical practice."

The project was funded by Prostate Cancer UK and the Movember Centre of Excellence, a joint venture between Queen's University Belfast and academic colleagues in Manchester.

We are delighted with the outcome of this study, which further proves the utility of this test in enabling clinicians to select the most appropriate therapy for their patients earlier in the care pathway.

## MOMENTUS MOVEMBER

This year was another successful one for the Movember fundraising team. Three events were held in support of men's health research this year: a Spin-a-thon, a Father Ted Pub Quiz (with raffle) and a Movember Bake Sale. All were widely supported by CCRCB researchers and members of the public and helped to raise a grand total of over £1,300. Congratulations to all of the prize winners and special thanks to all those who donated and participated from the Movember 2017 Team (Rebecca, Sharon, Chris, Kelly and Alice).



# PHOTO GALLERY



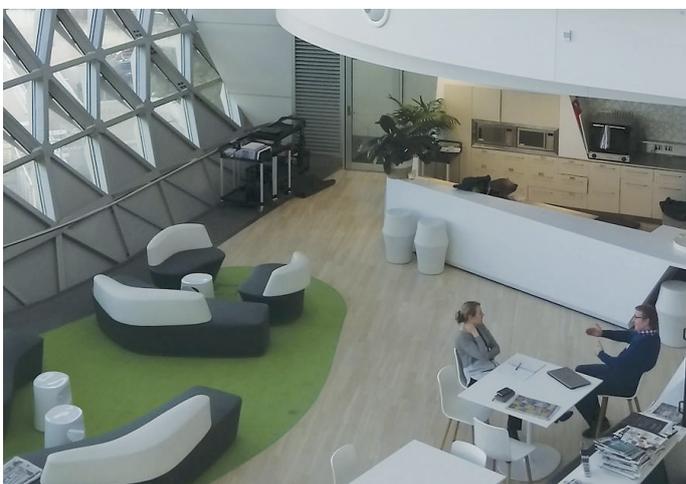
CCRCB researchers at the Prostate Cancer Foundation (PCF) meeting in Washington DC with Howard Soule, Chief Science Officer PCF.



The Dickson Family who are organising a walk to support Prostate Cancer UK recently visited the Centre and met with the CCRCB Prostate Cancer researchers.



The Social Committee organised a day out for staff hiking Slieve Donard on 26 August 2017. With the weather ranging from a hot summers day at the start to heavy mist and quite a temperature drop all of our intrepid explorers made it to the summit.



Dr Ian Mills (CCRCB, QUB) in discussions on deriving treatment response biomarkers from androgen receptor-targeted therapies in patient-derived prostate cancer models during a recent visit to the South Australian Health and Medical Research Institute (SAHMRI) in Adelaide. Other attendees included: Associate Professor Lisa Butler (SAHMRI/University of Adelaide, Prostate Cancer Research Group Leader, ARC Future Fellow), Dr Luke Selth (Dame Roma Mitchell Cancer Research Laboratories at the University of Adelaide), Associate Professor David Lynn (SAHMRI/Flinders University, EMBL Australia Group Leader in Biomedical Informatics), Dr Max Moldovan (SAHMRI, Lynn/Butler Group), Dr Joanne Gillis (SAHMRI, Butler Group).



Thanks everyone for taking part in the Pumpkin Carving Contest, we were really impressed with all of the pumpkins and we raised £60 for Stand Up To Cancer as well!

Thanks to our fantastic judges, Professor Kevin Prise and Ms Margaret Carr, two winners were chosen. There are more pictures of all of our brilliant entries on <https://twitter.com/CRUKBelfast>

## AWARDS AND PRIZES

**Dr Matthew Alderdice** was awarded the JD Williamson Prize 2017 (£1,000) on 3 November 2017 for his research paper entitled "Natural killer-like signature observed post therapy in locally advanced rectal cancer is a determinant of pathological response and improved survival" published in *Modern Pathology* June 2017.

**Ms Clare Crean** won a Recognition Prize for her talk "The role of DNA repair mechanisms in acute myeloid leukaemia" at the Haematology Association of Ireland meeting on 13–14 October 2017 in Belfast.

**Dr Catherine Higgins** received a Scholar-in-Training award to attend the AACR-NCI-EORTC International Conference on Molecular Targets and Cancer Therapeutics in Philadelphia in October 2017.

**Dr Eileen Parkes** a clinical post-doctoral researcher won the NatureJobs Journalism competition. The winning prize included a year's subscription to Nature, £50 amazon voucher, attendance at the Naturejobs career expo and spending the day with Nature editors and publishing her blog posts:

<http://blogs.nature.com/naturejobs/2017/10/13/the-naturejobs-career-expo-some-secrets-to-scientific-success/>

<http://blogs.nature.com/naturejobs/2017/10/06/finding-mentorship/>

Dr Parkes has also been awarded 1st place (and £150) at the Ulster Society of Gastroenterology Meeting on 6 October 2017 for her poster.

**Dr Ana González Sánchez** won the prize for Best Scientific Display Poster Presentation at the Haematology Association of Ireland meeting on 13–14 October 2017 in Belfast for her poster entitled "Is Src pathway a relevant target in acute myeloid leukaemia?"

**Ms Katie Stott** (2nd year PhD student) was awarded a National Cancer Research Institute (NCRI) Prize Award for her abstract entitled "HDAC inhibitors overcome resistance to IAP inhibitors in colorectal cancer by downregulating FLIP". The prize was a £250 bursary towards conference costs.



Dr Karen Kennedy, Director of the NCRI with Ms Katie Stott

**Dr Kyle B. Matchett** was awarded the Novartis Fellowship Award 2017 by the Haematology Association of Ireland in October 2017. The award is a prize of €10,000 and the Novartis Medal.



Dr Kyle B. Matchett being presented with his award by Dr Kathryn Boyd, President of the Haematology Association of Ireland

## CCRCB GREEN IMPACT TEAM AWARDS

Congratulations! CCRCB has achieved the Silver award for both "General Building" and "Laboratories" in the Green Impact Awards 2016-17! Together we have contributed to a reduction in the University's carbon emissions by 23.3k tonnes the past year.

Achievements such as these are possible through an accumulation of small actions as simple as switching off unnecessary lights. A little light can go a long way! We may not have a budget allowing us to update old appliances, however we can conserve the energy used by those we do have.

We are working with the Energy Officer from Estates Directorate to monitor energy consumption of things like laboratory fume hoods. Therefore we hope to demonstrate the value of switching equipment off when it is not in use.

In addition to our Silver award, CCRCB has also received the Environmental Improvement Award this year in collaboration with the Centre for Biomedical Sciences Education and the Centre for Experimental Medicine

Green Impact Teams for the Health Sciences Medicinal Garden. All the plants exhibited within the Garden are linked to current research and topical education within various degree subjects taught at Queen's.

As its Christmas time again, we thought you might like to know that rosemary, also planted in our Medicinal Garden, can be used as a miniature Christmas tree if you don't have a lot of room for a big tree! With that in mind, why not join our competition to decorate a rosemary tree with novel recycled items? Our potted rosemary Christmas tree will be found in the HSB tea room. A prize will be awarded for the most imaginative, recycled, mini Christmas tree decoration!

**Finally, check out our blog...**

<https://ccrcbgreenimpact.wordpress.com/> for more CCRCB Green Impact updates and ideas. If you are interested in contributing a piece to the blog, or would like to suggest a topic to be covered please contact Éilis Sutton (e.sutton@qub.ac.uk).

**green impact**

## CCRCB COURSE SHORTLISTED IN ALL-IRELAND HIGHER EDUCATION AWARDS

CCRCB's MSc Bioinformatics and Computational Genomics was shortlisted in two categories, Science and Health Sciences, at the annual gradireland Higher Education Awards. Now in its seventh year, submissions to the gradireland Awards are judged by specialist panels, comprising experts in their field, drawn from industry, careers, education and other renowned professionals in each subject area. Courses are judged on student feedback, development of transferrable skills and career development opportunities. Course reputation and innovation, resources, industrial and recruiter links and the research record of teaching staff are also considered. The MSc Bioinformatics and Computational Genomics was the only QUB course to feature in the shortlist.

The MSc Bioinformatics and Computational Genomics course draws students from both the life sciences and mathematics and

computing. A full-time one-year taught course, students gain valuable skills and experience in applying mathematics, statistics and computing techniques to address clinical and biological questions. Former students have gone onto careers in industry and the public sector or into bioinformatics research, undertaking PhDs.

The course team comprises staff from CCRCB, CEM and CPH and consists of Dr Jaine Blayney (course director), Dr Darragh McArt, Dr Ian Overton, Dr Simon McDade, Dr Amy-Jayne McKnight, Dr Jackie James, Dr David Simpson and Professor Ken Mills.

The full shortlist can be found here: <https://gradireland.com/events/gradireland-higher-education-awards-symposium-2018/558460-shortlist-2018>.



## NORTHERN IRELAND BIOBANK: UK BIOBANK OF THE YEAR 2017 RUNNER UP

The Northern Ireland Biobank (NIB) was awarded runner up in the 2017 UK Biobank of the Year Award. Presented at the UK Biobanking Showcase in London on 18 October 2017, the award is designed to highlight the work of Biobanks who go above and beyond in supporting research. Biobanks were asked to submit two research case studies that detailed how their work enabled high quality and impactful research. The case studies submitted by NIB outlined their contribution to two NIB ethically approved studies: Developing a resource of sequenced diagnostic tissue from men treated with radical radiotherapy for prostate cancer (Chief Investigator, Dr Suneil Jain) and Characterising the cell of origin of high grade serous ovarian cancer (Chief Investigator, Dr Paul Mullan).

The panel who were drawn from the UKCRC Tissue Directory and Co-ordination Centre Steering Committee reported: "The panel felt that the case studies highlighted the role of the Biobank well and had good focus on the research cited. As the cases detailed the way one project lead to another, they felt this was a good demonstration of how one piece of research led to further collaboration. Overall, the Biobank came across as a significant and valuable resource that is firmly established".

NIB would like to thank Dr Suneil Jain and Dr James Beirne for their assistance in developing the research case studies and congratulate Bloodwise Childhood Leukaemia Cell Bank who were awarded 2017 UK Biobank of the Year.



Dr Claire Lewis (NIB Operational Manager) receiving UK Biobank of the Year Runner Up award from Dr Phil Quinlan (Director of the UKCRC Tissue Directory and Co-ordination Centre)

# RECENT GRANTS AWARDED

Investigator(s)	Sponsor	Title	Amount	Start Date	End Date
Blayney, Jaine	Almac Diagnostics	Characterisation of novel pan-cancer molecular subgroups and development of associated stratifying biomarker signatures through the development of in silico integrated analysis methodologies	£27,002	01/10/17	30/09/21
Gonzalez de Castro, David	Sarcoma UK	Improving soft-tissue sarcoma diagnosis with non-invasive procedures	£23,749	01/08/17	31/07/18
Gonzalez de Castro, David James, Jackie Salto-Tellez, Manuel	Randox	Centre of Excellence for Diagnostics: Development of a multiplex oncogene mutation profiling array	£475,989	01/09/17	31/08/21
Longley, Dan Dunne, Philip McArt, Darragh McDade, Simon Lawler, Mark	Cancer Research UK	Impact of chemotherapy on anti-cancer immunity in molecular stratified subgroups of colorectal cancer	£554,375	01/08/17	31/07/20
McDade, Simon	BioSpyder	Investigating impact of therapy on tumour-immune interaction with novel high throughput transcription	£27,000	25/09/17	30/09/20
Mills, Ken	QUB Foundation / Leukaemia & Lymphoma NI	Senior Lecturer/Lecturer in Blood Cancers	£576,714	01/04/18	31/03/23
Mills, Ken	QUB Foundation / Leukaemia & Lymphoma NI	Clinical Research Fellow	£213,840	01/08/19	31/07/22
Mills, Ken Matchett, Kyle	Haematology Association of Ireland	Novartis Fellowship – Kyle Matchett	£8,718	01/12/17	31/05/19
Parkes, Eileen	Academy of Medical Sciences	AMS – Investigating the immune response to neoadjuvant chemotherapy	£29,250	01/09/17	30/09/19
Prise, Kevin McArt, Darragh	Brainwaves NI	PhD Studentship – Intergromics capacity in glioblastoma to accelerate biomarker discovery	£22,008	01/10/17	30/09/20
Prise, Kevin McArt, Darragh	Robin Menary Foundation	PhD Studentship – Intergromics capacity in glioblastoma to accelerate biomarker discovery	£22,000	01/10/17	30/09/20
Scott, Chris	Invest NI PoC	Development of a novel tumour immunotherapy neoantigen vaccine	£108,684	01/09/17	30/11/18
Van Schaeybroeck, Sandra	CRUK New Agents Committee - Pre-Clinical Grants	Targeting the endoplasmic reticulum stress pathway in BRAF mutant colorectal cancer using the combination of ONC-201 with Cobimetinib or Vemurafenib	£49,992	01/05/17	30/04/18
Wagh, David	Prostate Cancer UK	Clinical development of IAP antagonists in combination with radiation in high-risk prostate cancers	£482,319	01/01/18	30/06/20
Williams, Rich Taggart, Cliff Scott, Chris	Medical Research Council	Testing of POC Inhaled Cathepsin S inhibitors in models of Cystic Fibrosis	£54,635	01/11/17	30/04/18

## 66<sup>th</sup> PRESIDENT OF THE US RADIATION RESEARCH SOCIETY

Congratulations to Professor Kevin Prise who became the 66<sup>th</sup> President of the US Radiation Research Society at its annual meeting held in Cancun, Mexico from the 14–18 October 2017.



Professor Prise receiving the gavel from outgoing President Professor Charles Limoli



Group picture with members of the Radiation Biology Group who attended the Cancun meeting. From left to right, Miss Carla Maiorino, Dr Stephen McMahon, Miss Mihaela Ghita, Dr Pankaj Chaudhary, Dr Karl Butterworth, Professor Kevin Prise, Dr Hisanori Fukunaga, Miss Soraia Rosa and Miss Charlene Junkin

## OESOPHAGEAL PATIENTS ASSOCIATION (NI)

The UK has the highest incidence of oesophageal adenocarcinoma in the world and researchers at CCRCB are working to improve the lives of patients with this poor prognosis disease. On 7 November 2017 the Oesophageal Patients Association (OPA) NI Chair Helen Setterfield presented a cheque to the Upper GI Translational Research Group led by Dr Richard Turkington to support their work in developing novel biomarkers and treatments for oesophageal cancer.

The OPA is an organisation providing information and advice for patients and their families affected by oesophageal and gastric cancers in Northern Ireland. They are actively involved in campaigning and fundraising and in June 2017 held their Oesophacycle Challenge. A team of fundraisers cycled from Carrickfergus Castle to Ballycastle and back again to raise money for oesophageal cancer research and support in Northern Ireland. The OPA is now based at CCRCB so they can be closer to the patients they support and ongoing research.



Mrs Helen Setterfield (centre, Chair of the Oesophageal Patients Association NI) with Dr Rosalie Douglas, Dr Leanne Stevenson, Ms Niamh McCabe, Dr Richard Turkington, Ms Lauren Cairns and Ms Éilis Sutton of the Upper GI Translational Research Group

# RECENT PUBLICATIONS

- ALVI, M.A., WILSON, R.H. and SALTO-TELLEZ, M., (2017) Rare cancers: the greatest inequality in cancer research and oncology treatment, *Br J Cancer*, 21 Sept 2017 [Epub ahead of print].
- ASIM, M., TARISH, F., ZECCHINI, H.I., SANJIV, K., GELALI, E., MASSIE, C.E., BARIDI, A., WARREN, A.Y., ZHAO, W., OGRIS, C., McDUFFUS, L.A., MASCALCHI, P., SHAW, G., DEV, H., WADHWA, K., WIJNHOFEN, P., FORMENT, J.V., LYONS, S.R., LYNCH, A.G., O'NEILL, C., ZECCHINI, V.R., RENNIE, P.S., BANIAHMAD, A., TAVARE, S., MILLS, I.G., GALANTY, Y., CROSETTO, N., SCHULTZ, N., NEAL, D. and HELLEDAY, T. (2017) Synthetic lethality between androgen receptor signalling and the PARP pathway in prostate cancer, *Nat Commun*, 8: 374.
- BARRET, A., CATHERWOOD, M., THORNTON, P., MURPHY, P. and QUINN, J. (2017) Transformation of MDS/MPN-RS-T to AML - Trisomy 13, Resistant Thrombocytosis and Transient Disease Control with Oral Busulfan Therapy, *Am J Hematol*, [Epub ahead of print].
- BINGHAM, V., McLLREAVEY, L., GREENE, C., O'DOHERTY, E., CLARKE, R., CRAIG, S., SALTO-TELLEZ, M., McQUAID, S., LEWIS, C. and JAMES, J. (2017) RNAscope In Situ Hybridization confirms mRNA integrity in Formalin-Fixed, Paraffin-Embedded Cancer Tissue Samples, *Oncotarget*, 16 October 2017 [Epub ahead of print].
- BLYTH, B.J., COLE, A.J., MACMANUS, M.P. and MARTIN, O.A. (2017) Radiation therapy-induced metastasis: radiobiology and clinical implications, *Clinical and Experimental Metastasis*, 20 November 2017 [Epub ahead of print].
- BREEN, M.E., SHARPE, D.J., COLYER, H.A.A., HODGES, V.M., LAPPIN, T.R. and MILLS, K.I. (2017) GATA2 regulates the erythropoietin receptor in t(12;21) ALL, *Oncotarget*, 2 Aug 2017, doi:10.18632/oncotarget.19792.
- CREAN, C.M., MILLS, K.I. and SAVAGE, K.I. (2017) The potential of targeting DNA Repair deficiency in acute myeloid leukemia, *J. Cancer Therapy*, 1 Aug 2017 [Epub ahead of print].
- DUNNE, V., GHITA, M., SMALL, D.M., COFFEY, C.B.M., WELDON, S., TAGGART, C.C., OSMAN, S.O., McGARRY, C.K., PRISE, K.M., HANNA, G.G., and BUTTERWORTH, K.T. (2017) Inhibition of ataxia telangiectasia related-3 (ATR) improves therapeutic index in preclinical models of non-small cell lung cancer (NSCLC) radiotherapy, *Radiotherapy and Oncology*, 124, 475-481.
- GOULD, R., MCFADDEN, S.L., SANDS, A.J., McCROSSAN, B.A., HORN, S., PRISE, K.M., DOYLE, P. and HUGHES, C.M. (2017) Removal of scatter radiation in paediatric cardiac catheterisation: a randomised controlled clinical trial, *Journal of Radiological Protection*, 37, 743-760.
- HAY, J., LAPPIN, K., LIBERANTE, F., KETTYLE, L., MATCHETT, K.B., THOMPSON, A. and MILLS, K.I. (2017) Integrated analysis of the molecular action of vorinostat identifies epi-sensitised targets for combination therapy, *Oncotarget*, doi:10.18632/oncotarget.18910.
- JAIN, S., LYONS, C.A., WALKER, S.M., McQUAID, S., HYNES, S., MITCHELL, D., PANG, B., LOGAN, G.E., McCAVIGAN, A.M., O'ROURKE, D., McART, D., McDADE, S., MILLS, I., PRISE, K.M., KNIGHT, L.A., STEELE, C.J., MEDLOW, P.W., BERGE, V., KATZ, B., LOBLAW, D.A et al (2017) Validation of a Metastatic Assay using biopsies to improve risk stratification in patients with prostate cancer treated with radical radiation therapy, *Ann Oncol*, doi:10.1093/annonc/mdx637.
- JAVADI, A., DEEVI, R.K., EVERGREN, E., BLONDEL-TEPAZ, E., BAILLIE, G.S., SCOTT, M.G. and CAMPBELL, F.C. (2017) PTEN controls glandular morphogenesis through a juxtamembrane beta-Arrestin1/ARHGAP21 scaffolding complex, *Elife*, 6. doi:10.7554/eLife.24578.
- LEE, J.Y., GARCIA-MURILLAS, I., CUTTS, R.J., DE CASTRO, D.G., GROVE, L., HURLEY, T., WANG, F., NUTTING, C., NEWBOLD, K., HARRINGTON, K., TURNER, N. and BHIDE, S. (2017) Predicting response to radical (chemo) radiotherapy with circulating HPV DNA in locally advanced head and neck squamous carcinoma, *Br J Cancer*, 5 Sept 2017, 117(6):876-883.
- MAHYUDDIN, A.P., LIU, L., ZHAO, C., KOTHANDARAMAN, N., SALTO-TELLEZ, M., PANG, B., LIM, D., ANNALAMAI, L., CHAN J., LIM, T., BISWAS, A., RICE, G., RAZVI, K. and CHOOLANI, M. (2017) Diagnostic accuracy of haptoglobin within ovarian cyst fluid as a potential point-of-care test for epithelial ovarian cancer: an observational study, *BJOG*, 29 July 2017 [Epub ahead of print].
- McALEESE, J., BALUCH, S., DRINKWATER, K., BASSETT, P. and HANNA, G.G. (2017) The Elderly are Less Likely to Receive Recommended Radical Radiotherapy for Non-small Cell Lung Cancer, *Clin Oncol (R Coll Radiol)*, 29 Sept 2017, 29(9):593-600.
- McDONALD, F. and HANNA, G.G. (2017) Do protons have a role in the treatment of locally advanced NSCLC with Radiotherapy? *Lung Cancer*, 110:71-73.
- McMAHON, S.J., McNAMARA, A.L., SCHUEMANN, J., PAGANETTI, H. and PRISE, K.M., (2017) Mechanistic modelling enables predictions of intrinsic sensitivity to X-rays and charged particles. *Scientific Reports*, 7, 10790.
- MOHAMED, M., GONZALEZ, D., FRITCHIE, K., SWANSBURY, J., WREN, D., BENSON, C., JUDSON, I., JONES, R.L., FISHER, C. and THWAY, K. (2017) Desmoplastic small round cell tumor: evaluation of reverse transcription-polymerase chain reaction and fluorescence in situ hybridization as ancillary molecular diagnostic techniques, *Virchows Arch* [Epub ahead of print].
- MOORE, R.S., TIRUPATHI, S., HERRON, B., SANDS, A. and MORRISON, P.J., (2017) Dystrophin exon 29 nonsense mutations cause a variably mild phenotype, *Ulster Med J*, 86(3):185-188.
- MUNKLEY, J., McCLURG, U.L., LIVERMORE, K.E., EHRMANN, I., KNIGHT, B., McCULLAGH, P., McGRATH, J., CRUNDWELL, M., HARRIES, L.W., LEUNG, H.Y., MILLS, I.G., ROBSON, C.N., RAJAN, P. and ELLIOTT, D.J. (2017) The cancer-associated cell migration protein TSPAN1 is under control of androgens and its upregulation increases prostate cancer cell migration, *Sci Rep*, 7: 5249.
- NIBLOCK, A., McCONVILLE, D.O. and MORRISON, P.J., (2017) Zygodactyly is strongly associated with Acute Myeloid Leukaemia, *Br J Haematol*, 177(4):659-660.
- NIEMIEC, M.J., GRUMAZ, C., ERMERT, D., DESEL, C., SHANKAR, M., LOPES, J.P., MILLS, I.G., STEVENS, P., SOHN, K. and URBAN, C.F. (2017) Dual transcriptome of the immediate neutrophil and *Candida albicans* interplay, *BMC Genomics*, 18: 696.
- NOBLE, F., LLOYD, M.A., TURKINGTON, R., GRIFFITHS, E., O'DONOVAN, M., O'NEILL, J.R., MERCER, S., PARSONS, S.L., FITZGERALD, R.C. and UNDERWOOD, T.J. (2017) Multicentre cohort study to define and validate pathological assessment of response to neoadjuvant therapy in oesophagogastric adenocarcinoma, *Br J Surg*, 25 Sep 2017, doi:10.1002/bjs.10627 [Epub ahead of print].
- SCHROCK, A.B., DEVOE, C.E., McWILLIAMS, R., SUN, J., APARICIO, T., STEPHENS, P.J., ROSS, J.S., WILSON, R., MILLER, V.A., ALI, S.M. and OVERMAN, M. (2017) Genomic Profiling of Small Bowel Adenocarcinoma: Insights from a Comparative Analysis with Gastric and Colorectal Cancer, *JAMA Oncol*, Published online 15 June 2017 [Epub ahead of print].
- URBANUCCI, A. and MILLS, I.G. (2017) Bromodomain-containing proteins in prostate cancer, *Mol Cell Endocrinol*, doi:10.1016/j.mce.2017.06.007.
- VAN PUTTEN, M., JOHNSTON, B.T., MURRAY, L.J., GAVIN, A.T., McMANUS, D.T., BHAT, S., TURKINGTON, R.C. and COLEMAN, H.G. (2017) 'Missed' oesophageal adenocarcinoma and high-grade dysplasia in Barrett's oesophagus patients: A large population-based study, *United European Gastroenterology Journal*, doi:10.1177/2050640617737466 [Epub ahead of print].
- VOHHODINA, J., BARROS, E.M., SAVAGE, A.L., LIBERANTE, F.G., MANTI, M., BANKHEAD, P., COSGROVE, N., MADDEN, A.F., HARKIN, D.P. and SAVAGE, K.I. (2017) The RNA processing factors THRAP3 and BCLAF1 promote the DNA damage response through selective mRNA splicing and nuclear export, *Nucleic Acids Research*, doi.org/10.1093/nar/gkx1046 [Epub ahead of print].
- WALLS, G.M., LYON, A.R., HARBINSON, M.T. and HANNA, G.G. (2017) Cardiotoxicity Following Cancer Treatment, *UMJ*, [Epub ahead of print].
- WILSON, R.H., EVANS, J., MIDDLETON, M.R., MOLIFE, L.R., SPICER, J., DIERAS, V., ROXBURGH, P., GIORDANO, H., JAW-TSAI, S., GOBLE, S. and PLUMMER, R. (2017) A phase 1 study of intravenous and oral rucaparib in combination with chemotherapy in patients with advanced solid tumors, *British Journal of Cancer*, 116(7):884-892.

## NEW APPOINTMENT PROFILES

### Dr Aidan Cole

Dr Aidan Cole was appointed as Clinical Lecturer in Clinical Oncology in September 2017. Dr Cole was awarded his PhD at Queen's University Belfast in July 2014. His research investigating the radiobiological implications of respiratory motion in lung cancer radiotherapy was awarded the ESTRO Accuray award for high precision research in Geneva in 2013. He was subsequently awarded the St Lukes Medal for his clinical research project investigating 4D-CT and impact on outcomes for lung cancer patients. This was awarded by Professor Phillip Devlin (Dana Farber) in September 2013 at the Royal College of Surgeons, Ireland.

Following completion of his specialist training Dr Cole was awarded a Radiation Oncology

Research Fellowship in the Peter MacCallum Cancer Centre in Melbourne, Australia. His current research aims include improving the use of advanced imaging techniques (PSMA-PET, multiparametric MRI) to aid prognostication and treatment for prostate cancer patients. He will be Principal Investigator locally for stratified precision medicine trials evaluating the use of immunogenic signatures and immunotherapies in metastatic castration resistant prostate cancer. He will be integrally involved in the initiation of the use of stereotactic radiotherapy for oligometastatic disease in all tumour sites in the Northern Ireland Cancer Centre. He joins an expanding team of dynamic clinical academics, radiobiologists and physicists and will aim to enhance the research into targeted radionuclide theranostics within the Northern Ireland clinical research programme.



Dr Aidan Cole

### Dr Sorina Radulescu

Dr Sorina Radulescu joined us in November 2017 as Project Officer for the Movember Belfast-Manchester Centre of Excellence and the Belfast Experimental Cancer Medicine Centre (ECMC). Her role will be to help coordinate and promote closer ties between the researchers in Belfast and Manchester in order to fulfil the Centre's ambitious 5-year prostate cancer programme of research which started in 2014. Dr Radulescu will also facilitate the link between the ECMC and the Centre for Cancer Research and Cell Biology in Belfast working towards an easier progression from basic science to clinical trials.

Dr Radulescu joins us from the Centre for Experimental Medicine where she was performing her own research in the field of immunology and cancer. She completed her PhD in Molecular Genetics at the International Centre for Genetic Engineering and Biotechnology in Trieste, Italy. She then joined the Beatson Institute of Cancer Research in Glasgow for her post-doctoral training, followed by another post-doctoral position at the University of Manchester.

To contact Dr Radulescu or to find out more about her role please email: [s.radulescu@qub.ac.uk](mailto:s.radulescu@qub.ac.uk) or call 028 9097 2701.



Dr Sorina Radulescu

## NEW APPOINTMENTS

Welcome to the following new staff recently appointed to the Centre:

#### Academic Staff:

Dr Aidan Cole  
Dr Lisa Crawford

#### Clinical Academic Fellows:

Dr Graeme Greenfield  
Dr Gerard Malachy Walls

#### Research Staff:

Ms Victoria Dunne  
Ms Fiammetta Falcone  
Dr Valentina Giacometti  
Mr Luke Humphreys  
Dr Arman Javadi  
Ms Anamarija Jurisic  
Ms Lauren Kerrigan  
Dr Caitriona McLnerney  
Dr Dipankar Sengupta  
Ms Syed Umbreen  
Dr Xiao-lei Xia

#### Technical Staff:

Miss Amy Graham  
Miss Catherine Knowlson  
Miss Cheryl Latimer  
Miss Suzanne McCusker  
Dr Keara Redmond

#### Administrative Staff:

Ms Cheryl Bennett  
Ms Kiera McGill  
Mr Gervase McGivern  
Dr Sorina Radulescu  
Ms Liz Russell

#### Visiting Researchers:

Dr Miguel Alcoceba Sanchez  
Dr Lisa Pierson  
Miss Veronica Ruiz-Torres

## NEW RESEARCH STUDENTS

Welcome to the following postgraduate students who have commenced their research studies at CCRCB this academic year:

#### Student

Ali Alshehri  
Harmony Black  
Anna Boland  
Nathan Brown  
Jayne Davis  
Christine Fleming  
Samantha Gallagher  
Ryan Hagan  
Mariela Kyoreva  
Charlotte McBrien  
Neil McCafferty

Cathal McKinney  
Ross Murphy  
Julie Nicoll  
Alice Ormrod  
Gerard Quinn  
Emily Russell  
Veronica Spence  
Syed Umbreen

#### Supervisors

Prof Kevin Prise, Prof Joe O'Sullivan, Dr Aidan Cole  
Prof Ken Mills, Dr Kienan Savage  
Prof Daniel Longley, Prof Chris Scott, Richard Buick  
Prof Richard Kennedy, Dr Jaime Blayney, Dr Laura McKnight  
Dr Kienan Savage, Prof Paul Harkin, Mr Stuart McIntosh  
Prof Chris Scott, Prof Richard Kennedy, Dr Richard Williams  
Dr Rich Williams, Prof Chris Scott, Mr Brendan Gilmore  
Prof Dan Longley, Dr Phillip Dunne, Prof Chris Scott  
Prof Richard Kennedy, Dr Nuala McCabe, Mr Stuart McIntosh  
Dr Paul Mullan, Dr Niamh Buckley  
Prof David Gonzalez de Castro, Prof Ken Mills,  
Dr Mark Catherwood  
Prof Richard Kennedy, Dr Jaime Blayney, Dr Nuala McCabe  
Dr Suneil Jain, Dr Darragh McArt, Dr Melissa LaBonte Wilson  
Prof Dan Longley, Prof Chris Stott  
Dr Paul Mullan, Prof Chris Elliott  
Dr Simon McDade, Prof Dan Longley, Dr Bruce Seligmann  
Prof Kevin Prise, Dr Conor McGarry, Dr Giuseppe Schettino  
Prof Kevin Prise, Dr Darragh McArt  
Dr Ian Mills, Dr Simon McDade, Dr Nuala McCabe



**CCRCB** CENTRE FOR  
CANCER RESEARCH  
AND CELL BIOLOGY

# CELEBRATING A DECADE OF ADVANCES IN CANCER RESEARCH IN BELFAST

**CCRCB OPEN DAY**  
Saturday 17 February 2018  
10.00am–2.30pm

Talks from our leading researchers who  
are translating science into clinical practice  
at 10.30am and 12.30pm

- Find out about clinical trials and the NI Biobank
- Have a tour of a research laboratory and meet our research teams
- Hear how we research the causes, early diagnosis, survival and prevention of cancer
- Meet our local charities and funding bodies
- Interactive activities for all the family

**For further information contact:**  
Centre for Cancer Research & Cell Biology,  
Queen's University Belfast, 97 Lisburn Road, BT9 7AE  
T: 028 9097 2760 E: cccrb@qub.ac.uk



For registration details visit  
[www.nisciencefestival.com](http://www.nisciencefestival.com)  
Registration will go live on  
Thursday 11 January 2018



**QUEEN'S  
UNIVERSITY  
BELFAST**

Centre for Cancer Research & Cell Biology  
School of Medicine, Dentistry & Biomedical Sciences  
Queen's University Belfast, 97 Lisburn Road, Belfast, BT9 7AE  
T: +44 (0) 28 9097 2760  
W: [www.qub.ac.uk/ccrcb](http://www.qub.ac.uk/ccrcb)

**SHAPING  
A BETTER  
WORLD  
SINCE 1845**