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CCRCB
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Bulletin



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New Deputy Director Appointed

Congratulations to Professor Kevin Prise on his appointment to the post of Deputy Director of the Centre for Cancer Research and Cell Biology, replacing Professor Terry Lappin who retires in September.

Professor Prise joined CCRCB in April 2007 as Chair of Radiation Biology. He originally graduated from the University of Aberdeen with an Honours degree in Biochemistry and followed this with a PhD in Biochemistry/Cell Biology studying the mechanisms of action of the chemotherapeutic agents methotrexate and 5-fluorouracil. Since then he has done extensive studies on the mechanisms of action of ionising radiations in a range of model DNA, cell and tissue systems. He has worked at the internationally renowned Gray Cancer Institute in Northwood, Northwest London where he had been Head of the Cell and Molecular Radiation Biology Group. Along with Dr Giuseppe Schettino he has developed novel approaches for targeting a range of different types of radiation to cellular and subcellular targets. These approaches have challenged the accepted models for radiation effects at the cellular and subcellular levels and opened up the

possibility of new approaches and targets for therapy. They also impact on our understanding of the risks associated with low dose exposures. Since joining CCRCB his group has been working closely with Dr Joe O'Sullivan and Dr Alan Hounsell on translational projects in the area of advanced radiotherapies.



Professor Kevin Prise

Professor Prise said: "It was a tremendous honour to be asked to serve as Deputy Director and a significant challenge to continue the exemplary service given by Professor Lappin. However, his role of supporting the Director, was very much as part of the collegiate team of Division Heads and Directorate working together to meet the challenges and opportunities for CCRCB going forward."

Professor Prise will also be continuing with his role as Associate Director for Postdoctoral Studies within the Centre.

MLAs Interest in Cancer Research

Northern Ireland's politicians have praised the groundbreaking work of local researchers and clinicians after visiting the newly opened Belfast Cancer Research UK Centre. Jim Wells MLA, Chair of the Health Committee said: "We are delighted to see the world class research being carried out here in Belfast. The work taking place here will bring improved treatments for cancer to the people of Northern Ireland."

Committee members visited facilities at the Centre for Cancer Research and Cell Biology before holding an evidence session on the Sunbeds Bill. Professor Dennis McCance, Director of CCRCB, said: "We were able to demonstrate to the Health Committee how this Centre will bolster our efforts to bring together a variety of researchers and clinicians to collaborate and work together to improve the lives of cancer patients across Northern Ireland. By building closer links between scientists and doctors we want to increase the pace of research, leading to improved

treatments for patients. We should rightly be proud of the part we're playing in moving the latest scientific discoveries from the laboratory to the patient's bedside."

The Belfast Cancer Research UK Centre will help set the pace for national and international progress in cancer of the bowel, oesophagus and breast. It will also concentrate on pioneering the latest techniques in radiotherapy, improving cancer diagnosis and developing new, more effective drugs. The Centre aims to be a world leader in developing treatments tailored to individual cancer patients based on understanding the biology of the disease and how that varies among patients.

Professor Paddy Johnston, Chair of the Cancer Research UK Centre Governance Board and Head of the School of

Medicine, Dentistry and Biomedical Sciences, said: "The Cancer Research UK Centre establishes Belfast as one of the key cancer research sites both nationally and internationally, but most importantly it will substantially help us to translate scientific breakthroughs into improved cancer patient care. We need our politicians to support this work to ensure that we can continue to undertake such high quality research in Belfast."



Members of the Committee are pictured with Pro-Vice-Chancellor Professor James McElnay (right), Dean of the School of Medicine, Dentistry and Biomedical Sciences Professor Paddy Johnston (fourth from right), and Director of CCRCB Professor Dennis McCance (fifth from right)

Almac and Queen's University Belfast Showcase Northern Irish 'Oncology Hub' to Senior Washington DC Delegates

The event introduced the Almac led initiative to a US audience of senior pharma, academic and Governmental agencies to encourage strategic collaboration in oncology between the US and Northern Ireland.

On St Patrick's day 2010, Almac, an international drug development organisation, opened a high-level, invitation only, Washington DC event: 'From Science to Society: A Northern Ireland Showcase in Cancer Genomics and Personalized Medicine', highlighting the capabilities and exceptional work of Northern Ireland's established 'oncology hub'. The event was opened by Declan Kelly, US Economic Envoy to Northern Ireland, appointed by US Secretary of State, Senator Hillary Clinton. Arlene Foster, MLA, Minister for the Department of Enterprise, Trade and Investment presented 'Setting the Northern Ireland Context' and Dr John Niederhuber, Director, National Cancer Institute presented 'NCI – Northern Ireland Relationship'.

The 'oncology hub', a Northern Irish collaboration between academia and the pharmaceutical industry, is seeking to share its accrued expertise and to expand its links and association with the international and US based pharmaceutical, biotech and diagnostic industries, in addition to academic and clinical research centres.

Almac, working with Queen's University Belfast, is striving to increase research and development into personalised medicine, by acting as the bridge between academia and industry. Audiences included senior academics, Government sponsored health executives, clinical research and pharmaceutical executives. Moreover, US legislative officials from both the House of Representatives and the Senate, including senior staff from the office of former Democrat Presidential candidate, Senator John Kerry, Chair of the Senate Foreign Relations Committee, and Rhian Chilcott, Head of the Confederation of British Industry's Washington Office, attended the event.

Commenting on the event, Almac's CEO, Alan Armstrong, remarked: "We are delighted to take this opportunity to address key opinion formers and industry representatives in the US and to highlight Northern Ireland's 'oncology hub' and its specific expertise and extensive service offering in the realm of personalised medicine. Raising the hub's profile amongst senior decision makers and Government officials will help ensure that appropriate support reaches this commendable initiative, which is constantly striving to break new ground and foster further innovation in personalised medicine."

Belfast Relay for Life

Congratulations to Dr Kienan Savage and Professor Peter Hamilton who organised a very successful Cancer Research UK Relay for Life at the Malone Playing Fields in June. Relay is a 24 hour long event where teams walk round a track to celebrate the lives of those who have survived cancer and remember those who have died from the disease. Each team fundraises before and during the event.

The Belfast Relay for Life has raised more than £7,000 to date with over £1,500 being raised by CCRCB's very own Team Prise.

Thanks to everyone within and outwith CCRCB and Queen's who made this event a success and offered support. It really was a team effort with great results for Cancer Research UK.



Professor Peter Hamilton and Dr Kienan Savage with Beulah Irvine from Irvinestown who brought a number of cancer survivors to the event

International Collaboration Highlighted During US Senators' Visit

Massachusetts Senate President Therese Murray and Senator Joan Menard recently visited two of Queen's flagship research centres – CCRCB and ECIT – to discuss the further development of business links between Northern Ireland and the US.

Senate President Murray and Senator Menard met Minister for Employment and Learning Sir Reg Empey during their visit to CCRCB. The event was hosted by Pro-Vice-Chancellor for Research and Postgraduates Professor James McElnay and Professor Patrick Johnston, Dean of the School of Medicine, Dentistry and Biomedical Sciences. The programme included a discussion on the future development of educational and research partnerships between Northern Ireland and Massachusetts, a presentation of Queen's vision for Health and Life Sciences, and a tour of the Centre's laboratories.



L-R: Professor Johnston, Senator Menard, Minister Sir Reg Empey, Senate President Murray and Professor McElnay

Belfast CR-UK Centre Administrator Appointed



Sharon Dunwoody, CR-UK Centre Administrator

Cancer Research UK has been working in partnership with a number of UK universities, NHS Trusts and other funding partners to establish a network of Cancer Research UK Centres. The CR-UK Centres will be long term, sustainable centres of excellence in cancer, delivering world-class research, improved patient care and greater local engagement. Belfast was one of the first of the CR-UK Centres to be established and CR-UK hope to have at least twenty centres throughout the UK.

Sharon Dunwoody has been appointed as the Belfast CR-UK Centre Administrator and will provide professional and administrative support to the Centre and contribute to the development of the CR-UK Centre's strategic and operational objectives. A key role of this post is to provide a link between the Centre for Cancer Research and Cell Biology (CCRCB) and the adjacent Northern Ireland Cancer Centre and to liaise with the various stakeholders of the CR-UK Centre, the University, the

Retirement Symposium for Professor Terry Lappin

Forty-four years of research by Professor Terry Lappin was celebrated on 24 May during a special symposium held in the CCRCB. The symposium was opened by Professor Finbarr Cotter from the Barts and the London Hospitals with an excellent presentation relating HOX genes, zebrafish, leukaemia and future therapies – the talk even featured a cameo appearance by Dean Fennell! Two local speakers, Professor Henry Halliday and Professor Peter Maxwell, focused on the early and later stages of Terry's extensive research career. All three talks showed the range, impact and value of the studies that Terry has been involved in Belfast, UK and internationally. After coffee, Professor Patrick Johnston introduced the main feature of the afternoon: Terry's talk entitled "4.4 decades of research".

Throughout his talk, Professor Lappin was keen to highlight the importance of others in his career, particularly the haematology research group and of course his wife Gill. The respect others have for Terry was shown by nearly 100 people attending the symposium and reception including an ex-student who flew back from Libya specifically to express his appreciation and thanks for his support.

So is it onward to a quiet life for Professor Terry Lappin? Well anybody who knows him would wonder how he would cope if it was – so it is reassuring that although Professor Lappin is retiring from Queen's, he is undertaking a "mature post-doc" post for the next year in the laboratory of Professor Peter Radcliffe in Oxford. If that wasn't enough he has also taken on the role of editor for "Stem Cells". I am sure that everybody in the CCRCB, Queen's University Belfast and further afield who have had some dealings with Professor Lappin in the past forty-four years wish him and his family well for the future.



Professor Terry Lappin

Trust, the HSC R&D Office and CR-UK, ensuring that the objectives of the CR-UK Centre and the Northern Ireland Experimental Cancer Medicine Centre (NIECMC) clinical and translational research programmes are met.

Sharon began her career at Queen's in 1986 in the Department of Extra-Mural Studies (now Lifelong Learning). She left in 1991 to raise her family but came back in 2002 to a post in Information Services. In 2005, Sharon joined the Centre for Excellence in Interprofessional Education (CEIPE), a research project in the

School of Medicine, Dentistry and Biomedical Sciences which developed opportunities for healthcare students to learn together. After staying there for five years, Sharon was appointed as Belfast CR-UK Centre Administrator in CCRCB in April.

Sharon said: "I am delighted to join the team here at CCRCB and I am looking forward to the challenges of managing the Belfast CR-UK Centre."

Sharon is based in the General Office, CCRCB and can be contacted on ext 2189 or at s.dunwoody@qub.ac.uk.

Measures of Esteem

Congratulations to Dr Karl Butterworth who has been awarded a Young Scientist Award to attend the Annual Meeting of the Radiation Research Society (USA) in Maui, Hawaii in September and Anna Acheva who has obtained a Travel Award to attend the European Radiation Research Society Meeting in Stockholm in October.

Dr Giuseppe Schettino has been elected onto the committee for the UK Association for Radiation Research.

Professor Kevin Prise has been invited to join the Radiation and Cancer Biology Committee and the newly formed Particle Therapy Committee of the British Institute of Radiology. He has also been appointed as the Deputy Editor

(Radiobiology) of the British Journal of Radiology. Professor Prise is a member of the management committee of the EU COST Action, Nano-scale insights in ion-beam therapy (nano-IBCT), which has recently been funded. Professor Prise has also been appointed to the Royal College of Radiologists FRCR part 1 Examination Board.

Breast Cancer Campaign Funding for Queen's University Belfast

A Queen's researcher has been awarded funding from Breast Cancer Campaign to further investigate the role of the BCRA1 gene in the development of the disease. Dr Konstantin Panov from the School of Biological Sciences and CCRCB at Queen's has been awarded a £20,000 pilot grant. The grant forms part of £5 million awarded by Breast Cancer Campaign in 2009.

Dr Panov believes that the BCRA1 gene could be crucial in a process called ribosome production. Ribosomes are produced in large numbers when cells

become cancerous and are vital as they generate molecules required to help them grow and multiply. This pilot project aims to establish the role of the BCRA1 gene in this process.

Dr Panov will study breast cancer cells grown in the laboratory that either have no BCRA1 gene or one that does not work well. He will investigate the effect this has on the cells' ability to produce molecules that are building blocks for the ribosomes; enabling him to determine at what stage BCRA1 could be involved. Dr Panov said: "I am grateful to Breast Cancer Campaign for

this grant. I hope the study will provide vital knowledge about the BCRA1 gene that could help us stop ribosome production spiraling out of control and causing cells to become cancerous." Arlene Wilkie, Director of Research and Policy, Breast Cancer Campaign said: "There are many genes involved in breast cancer development and we need to find out their role in starting the disease in the first place. This pilot grant could be the first step in finding urgently needed new treatments to help beat breast cancer and increase the chances of survival for thousands of people."

CCRCB Summer Research Programme 2010

The CCRCB launched its first Summer Research Programme this year and there are currently 16 students working in the Centre for the summer months. While students have previously undertaken summer research in CCRCB, the establishment of the Summer Research Programme has enabled the Centre to recruit students locally, nationally and also from Europe and the USA. This year's cohort of students come from a diverse array of backgrounds and includes those studying biomedical science, medicine, biochemistry and other areas relevant to the life sciences. In addition, school pupils who are between years 13 and 14 from Northern Ireland schools have been awarded Nuffield Foundation bursaries to undertake internships in the Centre.

Students are assigned to projects within the Centre's focus groups which encompass haematological malignancies; breast cancer; gastrointestinal cancer; lung cancer; prostate and bladder cancer; radiation biology and bioinformatics. While taking part in original research as part of a dynamic group, students acquire practical laboratory techniques, gain knowledge of data analysis and interpretation and obtain first-hand experience of working in an academic research environment. At the end of the programme, all summer students will present their work to the CCRCB and prepare a report for their academic and laboratory supervisors. Participation in summer research will enable students to make informed career choices in addition to enhancing their personal skills portfolios.

Funding for this year's Summer Research Programme has been granted from the School of Medicine, Dentistry and Biomedical Sciences, the Wellcome Trust, NI Leukaemia Research Fund and the Nuffield Foundation.



Summer Research Students with Programme Co-ordinator Dr Karen McCloskey (front row, second right)

CCRCB Researcher Features in Cancer Research UK National Advertising Campaign

Following on from the success of last year's CR-UK's summer advertising campaign "Bad Day" (www.thousandsbeatcancer.org) that featured cancer survivors and their personal stories, a new campaign was launched in the media in July 2010. Clinical researchers from various Cancer Research UK Centres, hospitals and institutes were asked to take part including CCRCB's Dr Dean Fennell, a Cancer Research UK Clinical Scientist.

Dr Fennell said: "I was delighted to take part in Cancer Research UK's new national advertising campaign and to have the opportunity to highlight some of the groundbreaking research ongoing in Belfast." Last year's campaign raised £3m overall for the charity and during the online campaign, direct debits increased four-fold.

NILRF Open Evening

On Monday 17 May, the Northern Ireland Leukaemia Research Fund held it's bi-annual Open Evening to showcase the research it supports within the Haematology Research Group on the Ground floor of the CCRCB.

The Northern Ireland Leukaemia Research Fund (NILRF) was founded in 1963. It has raised over £7 million

and is proud that the money raised in Northern Ireland, stays in Northern Ireland to fund leukaemia research.

Nearly 90 fund raisers and interested members of the public attended the open evening where short talks were given by Professor Terry Lappin on the development of the haematology group over the past decade. Short scientific overviews were given by

Drs Alex Thompson and Sandra Irvine, prior to the laboratory based demonstrations of the research activities by students and post-docs in the lab. The NILRF have been particularly generous this year as they have committed to over £360k worth of support to CCRCB over the next 5 years, including the formation of a 4-year PhD studentship.

Race for Life 2010

This year 25 Cancer Research UK scientists and research nurses attended the Race for Life in Stormont on 30 May. Five thousand women covered the 5K course which included running the full length of the avenue at the front of Parliament Buildings.

A few of the scientists attending ran the race and the remainder were

involved in a variety of engagement activities with supporters of the race and participants.

Dr Richard Wilson, Director of the NI Cancer Clinical Trials Unit, took to the stage with five of the research nurses to say a personal thank you to everyone and to speak about their work in the Cancer Centre and local

cancer units. Thanks are also due to a group of enthusiastic researchers from CCRCB who are not currently funded by CR-UK but who also chose to volunteer at the race.

Next year Cancer Research UK is aiming to recruit 1 million women to take part in Race for Life events across the UK.

CCRCB

Photo Gallery



Cathy Fenning (middle) took part in a sponsored 9km ride around the scenic grounds of Shanes Castle in County Antrim with all horses and riders wearing pink. The event raised an amazing £2,200 for Cancer Research UK



NILRF held a books, buns and coffee morning on 18 June at the CCRCB. There was a great attendance and the final total raised was £350



Ciara Dunlop (left) and Stephen Hamilton (right) presenting a cheque for £2,127 for the NILRF to Professor Ken Mills

Recent Grants Awarded

Investigator(s): David Waugh
Sponsor: CR-UK
Title: Role of PTEN-Regulated CXC-Chemokine Signalling in Modulating the Prostate Tumour Microenvironment and its Response to Radiotherapy
Amount: £197,870
Period: 01/08/10 - 31/07/13

Investigator(s): Frank Emmert-Streib
Sponsor: EPSRC
Title: Detecting Pathological Pathways of Complex Diseases
Amount: £101,130
Period: 01/09/10 - 31/12/11

Investigator(s): Ken Mills
Sponsor: NILRF
Title: Support for Chair in Experimental Haematology
Amount: £250,000
Period: 01/05/10 - 30/04/15

Investigator(s): Ken Mills/Melanie Percy
Sponsor: NILRF
Title: PhD Studentship – The role of Ankyrin Repeat and SOCS Box Proteins (ASBs) in Acute Myeloid Leukaemia
Amount: £104,983
Period: 01/09/10 - 31/08/14

Investigator(s): Jackie James
Sponsor: Wellcome Trust
Title: Biomedical Vacation Studentship

2010 – Stromal-Tumour Cell Interactions in Oral Cancer
Amount: £1,440
Period: 05/07/10 - 27/08/10

Investigator(s): Sandra Irvine
Sponsor: BHSCT Charitable Funds
Title: Pre-Clinical Evaluation of Ubiquitin Proteasome Pathway Components as Therapeutic Targets in Multiple Myeloma
Amount: £32,401
Period: 01/01/10 - 31/12/10

Investigator(s): Paul Mullan
Sponsor: Breast Cancer Campaign
Title: Characterising the Repression of Cystatin 6 by TBX2 – Implications for Growth Control and Breast Tumorigenesis
Amount: £184,912
Period: 01/10/10 - 30/09/13

Investigator(s): Tom Flannery
Sponsor: Irish Institute of Clinical Neuroscience
Title: Investigation of the Role of Cathepsins in Astrocytoma Invasion and Angiogenesis in Vivo using an Orthotopic Rodent Glioma Model
Amount: 10,000 Euros
Period: 01/09/10 - 31/08/11

Investigator(s): Ken Mills
Sponsor: Royal Society – International Travel Grant – Dr Kerry Pettigrew

Title: Genome-Wide Association Study to Identify Genetic Variants which may confer Susceptibility to Pancreatic Cancer: Follow-Up Studies and Fine Mapping

Amount: £3,600
Period: 14/06/10 - 03/09/10

Investigator(s): Alex Thompson
Sponsor: International Union Against Cancer (UICC)
Title: UICC Yamagiwa-Yoshida Memorial International Cancer Study Grant – Dr Glenda Dickson
Amount: £3,906
Period: 01/08/10 - 31/10/10

Investigator(s): Kevin Prise and Joe O'Sullivan
Sponsor: UK Home Office
Title: Triage of Radiation Casualties Using Protein Biomarkers
Amount: £159,000
Period: 31/03/10 – 29/02/13

Investigator(s): Dean Fennell and Jim Johnston
Sponsor: Cancer Research UK Discovery Committee
Title: Validation of Ubiquitin Specific Protease USP17 as a Novel Target in Cancer Treatment
Amount: £148,353
Period: 01/05/10 – 01/05/12

15th Anniversary Golf Event for Breast Cancer Research

The Sandra Campbell Ladies Open golf competition in aid of Breast Cancer research has been taking place every June in Dungannon Golf Club since 1996. It is very well supported and around 100 lady golfers play each year from Dungannon Golf Club and several clubs across Northern Ireland.

The competition was started by Sandra Campbell who was a past Lady Captain of the golf club in 1995. Sandra was a PE teacher by profession and loved her golf. She was a very energetic and bubbly person who was a natural when it came to organising events and getting people involved. Since her sad death in 2005, her husband and children have carried on the competition. Much of the day is sponsored by local businesses and an auction and raffle are held in the evening to raise money. In particular, Curleys, The Oak Centre in Dungannon, have sponsored the gold prizes for the competition for the last 15 years.

Dr Jennifer Quinn and Dr Gareth Irwin from CCRCB attended this year's event on 22 June and spoke about their research in breast cancer. Thankfully over the years the competition has raised thousands of pounds in aid of Breast Cancer research.

This year £3,536 was raised. We would like to thank the Campbell family for their commitment in organising this annual event to support the Breast Cancer research work within the Centre for Cancer Research and Cell Biology.



Michelle Napier (centre, daughter of Sandra Campbell and BBC News Presenter) presenting a cheque for £3,536 to Dr Jennifer Quinn and Dr Gareth Irwin from the Breast Cancer research group, CCRCB

CCRCB-ECIT Collaboration Seminar

The first in a series of collaboration seminars between the CCRCB and ECIT (Institute of Electronics, Communications and Information Technology) was held on 17 June 2010 at the ECIT Institute's office in the NI Science Park.

Organised by Professor Peter Hamilton and Dr Yin Hai Wang from the CCRCB's Bioinformatics group, together with Dr David Linton of ECIT, the main purpose of this first seminar was to explore potential areas of joint CCRCB/ECIT research.

The seminar, chaired by Dr Linton, provided an opportunity for consolidation of existing strategic collaboration partnerships and to explore joint research activities, within the context of the current MRC/EPSC funding environment.

At the seminar, members from the Bioinformatics group, including Professor Peter Hamilton, Dr Andreas Albrecht, Dr Frank Emmert-Streib and Dr Shu-Dong Zhang, provided an overview of their research, while highlighting prospective areas of ECIT input, such as access to high-performance computing, cloud computing and tissue imaging. ECIT research directors from Digital Communication, High Frequency Electronics, System-on Chip, Speech and Vision Systems, including Professor Danny Crookes, Professor Alan Marshall, Dr Peter Milligan and Dr Ian O'Neill to name but a few, introduced their respective areas of work, including existing collaborations with the CCRCB, with a particular focus on areas from which ECIT-based knowledge and technology could be applied to cancer and medical research.

In the next session of this seminar series, researchers from ECIT will be invited to the CCRCB to tour the lab facilities and meet with members from other CCRCB groups in order to explore further areas of collaboration.

The Bioinformatics group would like to thank all CCRCB/ECIT members who contributed to the seminar and for making it such a fruitful and enjoyable session.

For further information on the next seminar or to discuss potential joint projects, please contact: Dr Yin Hai Wang (y.wang@qub.ac.uk) or Professor Peter Hamilton (p.hamilton@qub.ac.uk).

Tutorial at ISMB 2010 in Boston

As part of the ISMB 2010 (Intelligent Systems for Molecular Biology) taking place in Boston (USA) Dr Frank Emmert-Streib and his colleague Galina Glazko from the University of Rochester, NY, organised a tutorial with the title

'Pathway analysis of expression data: Deciphering functional building blocks of complex diseases'

ISMB is the major meeting of the International Society for Computational

Biology (ISCB) and represents the largest bioinformatics/computational biology conference. This tutorial will also be provided at the CCRCB in November, in the form of a two-day workshop.

Recent Publications

BUTTERWORTH, K.T., COULTER, J.A., JAIN, S., FORKER, J., MCMAHON, S.J., SCETTINO, G., PRISE, K.M., CURRELL, F.J. and HIRST, D.G. Evaluation of cytotoxicity and radiation enhancement using 1.9 nm gold particles: potential application for cancer therapy, *Nanotechnology* (In press).

EL-TANANI, M., (2010), *Molecular Mechanisms of Neoplastic Transformation*, Belfast, Transworld Research Network.

HIGGINS, C.A., BELL, T., DELBEDERI, Z., FEUTREN-BURTON, S., MCCLEAN, B., O'DOWD, C., WATTERS, W., ARMSTRONG, P., WAUGH, D. and VAN DEN BERG, H. (2010) Growth Inhibitory Activity of Extracted Material and Isolated Compounds from the fruits of *Kigelia pinnata*, *Planta Med.* 17 Jun 2010, DOI: 10.1055/s-0030-1250046.

KADHIM, M.A., LEE, R., MOORE, S.R., MACDONALD, D.A., CHAPMAN, K.L., PATEL, G. and PRISE, K.M. (2010) Genomic instability after targeted irradiation of human lymphocytes: Evidence for inter-individual differences under bystander conditions, *Mutation Research*, 688, p91-94.

KAVANAGH, J.N., CURRELL, F.J., TIMSON, D.J., HOLSCHWEITER, M.H., BASSLER, N., HERRMANN, R., PRISE, K.M. and SCETTINO, G. Experimental set up and first measurement of DNA damage induced along and around an antiproton beam, *European Physical Journal D* (In press).

PICKARD, A., WONG, P-P. and MCCANCE, D.J. Acetylation of Rb by P/CAF is required for nuclear localization and keratinocyte differentiation, *J. Cell Sci* (In press).

PRISE, K.M. (2010) Radiation-induced bystander responses: Potential role in cancer therapies, In *"Molecular Mechanisms of Neoplastic Transformation"* (El-Tanani, M.K., Ed) ISBN 978-81-7895-445-5.

REDMOND, K.L., CRAWFORD, N.T., FARMER, H., D'COSTA, Z.C., O'BRIEN, G.J., BUCKLEY, N.E., KENNEDY, R.D., JOHNSTON, P.G., HARKIN, D.P. and MULLAN, P.B. (2010) T-box 2 represses NDRG1 through an EGR1-dependent mechanism to drive the proliferation of breast cancer cells, *Oncogene*, 2010 Mar 29 [Epub ahead of print].

SALOMAA, S.I., WRIGHT, E.G., HILDEBRANDT, G., KADHIM, M.A., LITTLE, M.P., PRISE, K.M. and BELYAKOV, O.V. (2010) Editorial Non-DNA targeted Effects, *Mutation Research*, 201, p1-2.

SCETTINO, G. and PRISE, K.M. (2010) Application of microbeams to the study of the biological effects of low dose irradiation, In *Charged Particle and Photon Interactions with Matter-Recent Advances, Applications, and Interfaces* (eds., Y. Hatano, Y. Katsumura, and A. Mozumder,) Taylor & Francis, Boca Raton.

SHAO, C., ZHANG, J. and PRISE, K.M. (2010) Differential modulation of a radiation-induced bystander effect in glioblastoma cells by pifithrin- α and wortmannin, *Nuclear Instruments and Methods in Physics Research B*, 268, p627-631.

SHI, Z., HODGES, V.M., DUNLOP, E.A., PERCY, M.J., MAXWELL, A.P., EL-TANANI, M. and LAPPIN, T.R. (2010) Erythropoietin-induced activation of the JAK2/STAT5, PI3K/Akt, and Ras/ERK pathways promotes malignant cell behaviour in a modified breast cancer cell line, *Mol Cancer Res*, 4, p615-26.

Events 2010

The British Institute of Radiology

6 September 2010

BIR, London

'Late Effects of Radiotherapy: Better Recognition, Better Intervention, Better care'.

The programme will offer an exploration of the diversity of radiotherapy effects, new understandings of mechanisms and the evidence base for management.

For further information and registration please refer to:

www.bir.org.uk

EORTC Course

7-10 September 2010

Brussels, Belgium

'Methodology of Cancer Clinical Trials: The Next Generation'.

The course will focus on the new aspects and methodological challenges of modern cancer clinical trials.

For further information and registration please refer to:

www.eortc.be/Seminar/Educationpgm/Method2010/Default.htm

Eighth International Workshop on Pharmacodynamics of Anticancer Agents

17-21 October 2010

Hakone, Japan

The workshop will focus on research that could have direct or indirect relevance to ongoing or future research in the field of pharmacodynamics of anticancer therapy.

For further information and registration please refer to:

www.princehotels.com/en/the_prince_hakone/

First Annual Inaugurate Symposia on Severe Cancer Drug Discovery of BIT's Eighth Annual Congress of International Drug Discovery Science and Technology

23-26 October 2010

Beijing International Convention Centre, Beijing, China

'Supporting Systems for Major Innovative Drugs'.

For further information and registration please refer to:

www.iddst.com/iddst2010/

The British Institute of Radiology

3 November 2010

BIR, London

'Management of Adult Central Nervous System Tumours'.

The programme will offer a review and update of current practice, including CSA irradiation and the treatment of cerebral oligometastasis and a look at future developments in the treatment of CNS.

For further information and registration please refer to:

www.bir.org.uk

NCRI Cancer Conference

7-10 November 2010

BT Convention Centre, Liverpool, UK

Keynote Speakers - Doug Hanahan and Bob Weinberg.

For further information and registration please refer to:

www.ncri.org.uk/ncriconference

Biochemical Society Independent Meeting / Irish Area Section Annual Meeting

25-26 November 2010

Hilton Hotel, Templepatrick, Belfast

'Signalling and Human Disease'.

This event is aimed to encourage the involvement of young investigators and priority will be given to abstracts submitted by post docs and PhD students.

For further information and registration please refer to:

www.qub.ac.uk/sites/SignallingandHumanDisease/

The British Institute of Radiology

10 December 2010

BIR, London

'Multidisciplinary Collaboration: Training and Beyond'.

A multidisciplinary meeting addressing the future of radiology and its impact on today's trainees. The day will look at radiology in the 21st Century, the challenges of research in radiology and international radiology.

For further information and registration please refer to:

www.bir.org.uk

CCRCB Events

CCRCB Retreat

23-24 September 2010

Rosspark Hotel, Ballymena, Co Antrim

Two day retreat for all CCRCB Investigators to discuss issues such as the strategy for the Centre, the focus groups and education.

CCRCB Open Day for AS Level Students

2 October 2010

CCRCB Building

Sixth International CCN Workshop

21-23 October 2010

Slieve Donard Hotel, Newcastle, Co Down

The programme will cover a breadth of research themes which will appeal equally to cell and molecular biologists and translational researchers.

For further information and registration please refer to:

www.ccnociety.com/index.html

Mitchell Lecture 2010

18 November 2010

CCRCB Building

Speaker: Frank McCormick, PhD, FRS
Helen Diller Family Comprehensive Cancer Centre,
University of California, San Francisco.

SAB Visit

23-24 March 2011

CCRCB Building

Third Visit of Scientific Advisory Board.

School of Medicine, Dentistry and Biomedical Sciences Postdoc Society AGM

The Society's AGM will be held in September, with full details to be circulated nearer the time. The AGM will be open to all staff and students in the School.

The Committee is urgently seeking new members from the research staff body.

For further information please refer to:

www.qub.ac.uk/schools/mdbs/Research/postdoc/

or contact: postdoc.soc@qub.ac.uk

New Appointments

Welcome to the following new staff who have recently joined the Centre:

Research Staff:

Dr Ka Kui Chan
Dr Miriam Sgobba
Dr Izabela Stasik

Honorary Staff:

Dr Mark Catherwood (Lecturer)
Dr Sandra Irvine (promoted to Reader)
Prof Glenn McCluggage (Professor)