INSIDE THIS ISSUE:

Professor Manuel Salto-Tellez (pictured) and Professor Mike Clarke talk about being part of MDBS plans to develop a world-leading Institute of Health Sciences. (page 3)
Welcome to the second edition of the School of Medicine, Dentistry and Biomedical Sciences newsletter. We lead this issue with a focus on our recent success in phase one of our global recruitment exercise with the appointment of two new chairs, in Molecular Pathology and Research Methodology. The newsletter also reviews a number of recent, key research and education highlights as well as focusing on some of the achievements of our staff and students.

Comments on the newsletter or suggestions for future editions should be forwarded to the School Office: pjmedschool@qub.ac.uk

More information on the School and latest developments can be accessed through the School website: http://www.qub.ac.uk/schools/mdbs/
In the first edition of SMDB News we focused on the School's global campaign to recruit the best scientific and clinical leaders. We are delighted to report on the success in Phase 1 which sees two major appointments to the School, with Professor Manuel Salto-Tellez joining the Centre for Cancer Research and Cell Biology as a Clinical Professor in Molecular Pathology and Professor Mike Clarke as Professor of Research Methodology in the Centre for Public Health. Anne Langford from the University's Corporate Affairs office talked to Manuel and Mike on their careers to date and their decisions to be part of the School's plans to develop a world-leading Institute of Health Sciences.

Appointments to five professorial positions in Phase 2 are now being finalised and we have launched Phase 3 which includes a further five positions. Further information on the global recruitment exercise is available from the University’s Human Resources website: http://www.qub.ac.uk/sites/QUBJobVacancies/

PROFESSOR MANUEL SALTO-TELLEZ

The commitment to excellence which characterises the Centre for Cancer Research and Cell Biology was the deciding factor in persuading Manuel Salto-Tellez, the University's new Professor of Molecular Pathology, to take up his post. He said: "The striking difference between the CCRCB and other research centres which I was considering was its positive attitude towards the future role of science, and the key role of CCRCB to be a main player in it. It was clear from talking to the researchers and to Professors Paddy Johnston and Dennis McCance that Queen's and CCRCB have a very ambitious and forward-looking approach to the future.

"I was very impressed by their willingness to excel, and by their drive to do so. They are transforming the way in which medical and biomedical sciences research is carried out. This is very important to me, as the focus of my research is to try to understand diseases from two different perspectives – the traditional laboratory-based morphological approach and the molecular approach. This is an exciting field, and at Queen's we are laying the groundwork for a number of new initiatives, the first of which is developing a molecular pathology research programme."

Over the last 25 years, Professor Salto-Tellez's medical and research pursuits have taken him from his native Spain to different parts of the world. He started his medical education at the Universities of Oviedo (Spain), Aachen (Germany) and Leiden (Netherlands), and went on to train as a histopathologist in the UK, and a molecular pathologist in UPENN.

For the last 10 years, he was an Associate Professor of Pathology, consultant pathologist and research scientist at the National University of Singapore and its hospital. Since 2001, Professor Salto-Tellez's main activity in science and diagnostics has been the integration of the phenotypic and genotypic dimensions of disease, primarily cancer. He believes that it is essential to integrate morphological and molecular research to gain the best possible outcomes for patients.

He said: "I came to pathology because I was curious not only about diagnosis of disease but also the reasons why disease occurs, and molecular pathology was a natural fit.

"I am proud to be joining the scientific and pathology communities of Northern Ireland, and I look forward to working on morpho-molecular integration in all aspects of science, diagnostics and therapeutics here at Queen's. I hope that this approach will contribute to advancing the Centre's research reputation and will help to make a difference to healthcare not only in the region but internationally."
Aside from their distinguished CVs, Professor Salto-Tellez, and his new colleague, Professor Mike Clarke, who was appointed to the Chair of Research Methodology at the Centre for Public Health in March, have another point in common. Both took a circuitous route to Queen’s.

In the case of Professor Clarke, his academic journey took him from Leeds where he grew up, to Oxford where he went to university and began working in health research, and to Dublin where he moved with his family in 2007.

His career has also followed a varied path. He went to Oxford to study chemistry but realised that, although research was his passion, bench-based research was not for him. After completing the chemistry element, he spent the fourth year of the course studying the history of drug abuse which led to a DPhil in the history of suicide by poisoning.

He joined the Clinical Trial Service Unit (CTSU) in Oxford in 1989, where he worked on the collaborative overview of randomised trials for the treatment of women with breast cancer. Then, in the early 1990s, as The Cochrane Collaboration was being established, he oversaw key aspects of the development of the methods and the software for Cochrane reviews, now widely used across systematic reviews outside the Collaboration as well. He was Chair of the International Steering Group from 2002 to 2004. In 2002, he took over as Director of the UK Cochrane Centre with a particular focus on improving the quality and relevance of Cochrane reviews.

Professor Clarke’s work will develop better ways to engage with practitioners, patients, policy makers and the public in the choice of research questions, the implementation of that research and the use of its findings. His work on accessibility includes Evidence Aid, seeking to make it easier for people and organisations planning for and responding to natural disasters to use systematic reviews in their decision making (www.EvidenceAid.org). As well as improving outcomes for people and communities affected by disasters and other humanitarian emergencies, Evidence Aid provides an opportunity to develop better ways to conduct and disseminate research.

Asked what drives him, Mike replied that it is turning the uncertainties faced by people making decisions about healthcare into questions that can be answered through good and effective research.

He said: “My work with the Clinical Trial Service Unit (CTSU) in Oxford and links with the Cochrane Collaboration gave me a unique insight into many of the challenges of conducting and reporting research.

“My move to Queen’s will build on that experience in an environment where I can use research to improve research, and to contribute to a dynamic team making an impact far beyond the University and Northern Ireland.”
A collaboration between Queen’s University Belfast, the Belfast Health and Social Care Trust (BHSCT) and the University of Ulster will create a unique Biobank of clinical samples to support biomedical research within academia and industry across Northern Ireland.

Phase one of the NI Biobank, led by Centre for Cancer Research and Cell Biology (CCRCB) researchers, Dr Jacqueline James and Professor Peter Hamilton, will establish a collection of high quality tumour tissues and bloods from consented patients being treated for cancer in the Belfast Trust. This bank of tumour samples will complement both the Experimental Cancer Medicine Centre (ECMC) and the CR-UK Centre initiatives within CCRCB by promoting translational cancer research. Collectively over £1.9M has been secured to develop the infrastructure necessary for tumour banking to be successful. Tissue and bloods will be accrued from individuals with GI, Breast, Lung, Head and Neck, Gynaecological and Gastrointestinal cancers; the bank will also support the storage of samples retained during trials undertaken in the NI Cancer Clinical Trials Centre and Network.

**£1.74 MILLION GRANT BOOMS CYSTIC FIBROSIS RESEARCH**

Scientists at Queen’s have begun work into improving the lives of thousands of Cystic Fibrosis sufferers thanks to the award of a £1.74 million US-Ireland Research and Development Partnership grant.

The grant has been approved by the National Institutes of Health (NIH) in the USA with funding for the Queen’s component provided by Health and Social Care Research and Development (HSC R&D Division) and the Medical Research Council. The grant is the largest ever to be awarded in the UK to study the microbiology of Cystic Fibrosis pulmonary infection.

The study is a collaborative US-Ireland international study between researchers in the Centre for Infection and Immunity (CII) and the School of Pharmacy at Queen’s, the Royal College of Surgeons Ireland, Dublin, the University of North Carolina at Chapel Hill, USA.

Leading the study, Professor Stuart Elborn, Director of the Centre for Infection and Immunity said: “The key goals of this study are to find out the role of anaerobes in causing damage to the lungs of people with Cystic Fibrosis. Anaerobes are bacteria that do not need oxygen to survive and we will determine whether their presence in the lung contributes to infection there.

“We will also examine whether the bacteria are able to produce chemicals that can damage lung tissue and break down antibiotics given to treat lung infection. We will also look at how effective different antibiotics are in treating them.”

He added: “The results of the study will be of important clinical relevance to people with Cystic Fibrosis because if we show that these anaerobes are contributing to infection and inflammation in the lungs of Cystic Fibrosis patients, in the future, patients could potentially be given more appropriate and effective antibiotics which should improve their clinical outcome and quality of life.”

The research project has been funded for five years with an aim of recruiting a total of 450 Cystic Fibrosis patients across the three sites. The work will be performed in the ‘US-Ireland Anaerobe Laboratory’ in the Centre’s laboratories in the Medical Biology Centre which have been recently refurbished - specifically to facilitate the delivery of this project.
Malaysia is a country that is undergoing a rapid epidemiological and demographic transition characterised by a reduction in deaths from communicable diseases, an increase in average life expectancy, and an epidemic rise in chronic non-communicable diseases such as cardiovascular disease, cancer and diabetes. Chronic diseases are now a major public health problem in Malaysia and these diseases threaten a rapidly growing population of 26 million people, most of whom are younger than 65 years of age. There is an urgent need to undertake epidemiological and public health research within Malaysia to investigate the determinants of non-communicable diseases in this population and explore public health approaches to minimise the future burden of disease within the country. Members of the Centre for Public Health (CPH), led by Professor Liam Murray have established a Public Health Research Collaboration with the Centre for Population Health (CePH), University of Malaya (UM) to help strengthen the public health research base within Malaysia and undertake research that will have significance within Malaysia, other parts of Asia and worldwide. The UM lead is for the initiative is Dr Tin Tin Su, a Health Economist and Public Health Physician/Researcher. The collaboration is part of a wider QUB research collaboration with UM, which involves a wide range of projects and initiatives e.g. in medicinal chemistry, parasitology, and ethnic studies.

The following research areas/projects are being developed as part of the Public Health Research Collaboration:

- Risk factors for chronic disease in Malaysian adolescents, a nationwide cohort study (MyHeart)
- The Malaysian Breast Cancer Cohort study (MyBCC)
- Population based Cancer Awareness, a comparison between Malaysia and Northern Ireland/UK

**RISK FACTORS FOR CHRONIC DISEASE IN MALAYSIAN ADOLESCENTS, A NATIONWIDE COHORT STUDY (MYHEART)**

Risk factors for chronic disease in Malaysian adolescents, a nationwide cohort study (MyHeart). A large cohort study of Malaysian adolescents is being developed with a focus on measuring the prevalence of lifestyle and other factors that influence health and illness in this section of the population and their future risk of chronic disease. Comparisons will be made with similar data collected within Northern Ireland in the Young Hearts series of studies. Many health related factors and outcomes will be examined e.g. physical activity/fitness, nutrition, overweight/obesity, lung function/asthma, mental and sexual health, drug, tobacco and alcohol use. No such studies have been undertaken in population representative samples in Malaysia. Associate Professor Nabilla Abdul Mohsein Al-Sadat (UM) and Professor Murray held project workshops in June 2010 and February 2011 in CePH, UM. These were attended by a broad spectrum of Researchers, Public Health Professionals, and Ministry of Health Officials from throughout Malaysia, who are now actively planning and seeking funding for this study. In addition, a PhD student (Miss Loubaba Mamluk), a nutritionist, has started her studentship within QUB (supervisors Professor Murray, Dr Marie Cantwell, Professor Al-Sadat). She will work on both the Young Hearts 2000 study and the MyHeart study. The MyHeart project will generate new knowledge of international importance in the area of adolescent health and future disease risk.

**MALAYSIAN BREAST CANCER COHORT STUDY (MYBCC)**

Breast cancer is the commonest cancer in Malaysia. Few data are available on the outcomes following a breast cancer diagnosis or the impact of different cultural or lifestyle influences on disease progression, survival or quality of life in women who have been diagnosed with this cancer in Malaysia. A cohort study of breast cancer patients diagnosed at the University of Malaya Medical Centre is under development. This study is being led by Professor Yip Cheng Har and Associate Professor Nur Aishah Mohd Taib, Department of Surgery UM. Lifestyle, including dietary intake and supplement use, physical activity, complementary and alternative therapies will be assessed in patients with breast cancer and explored in relation to disease progression. Blood and tissue will be taken to allow potential biomarkers of progression to be examined. The study will build on the expertise of Professor Yip’s team in breast cancer clinical and epidemiological research and will include QUB’s interest and developing expertise in cancer survival and cancer survivorship studies. It will provide a unique dataset to investigate lifestyle and other influences on breast cancer progression and mortality in an ethnically diverse population.

**POPULATION BASED CANCER AWARENESS COMPARISON BETWEEN MALAYSIA AND NORTHERN IRELAND/UK**

Patients present with cancer at a late stage in Malaysia and although the reasons are largely unknown, presentation differs by race/ethnicity. A major initiative in cancer awareness and early detection is currently being undertaken within the UK under the auspices of the National Awareness and Early Detection Initiative (NAEDI). An instrument for measuring cancer awareness in the population has been developed, validated and administered to a population representative sample within England. The instrument will also be administered in Northern Ireland, in other European countries and in Australia as part of international benchmarking project. Dr Anna Gavin (Northern Ireland Cancer Registry) and Dr Michael Donnelly (CPH) are involved in this project. No population based surveys of cancer awareness have been undertaken in Malaysia to date. A PhD student (Mr Mohd Roshidi Ismail) has been recruited in UM to undertake a cancer awareness survey of a representative sample of the Malaysian population and comparisons will be made with available UK and Northern Irish data. Professors Al-Sadat and Murray and Dr Gavin are supervisors of this student and Dr Donnelly, QUB, will assist with supervision.

**NUTRITIONAL EPIDEMIOLOGY IN CHRONIC DISEASE**

Professor Murray and Dr Cantwell delivered a research symposium on Nutritional Epidemiology in Chronic Disease in UM in February 2011. Nutrition is an important focus of the studies being undertaken within the collaboration and it is expected that further studies will be developed in this area.
A breakthrough by scientists at Queen’s could help reduce heart failure in cancer patients around the world, and ultimately increase survival rates.

Scientists at Queen’s Centre for Vision and Vascular Science have discovered the role of an enzyme which, when a patient receives chemotherapy, can cause life-threatening damage to the heart. This has, until now, restricted the amount of chemotherapy doses a patient can receive; but while protecting the heart, this dilutes the chemotherapy’s effectiveness in destroying cancerous tumours.

By identifying the role of the enzyme - NADPH oxidase - work can now go ahead into making chemotherapy treatments more effective and reduce the toxic effects of cancer treatment on the heart.

Dr David Grieve, jointly leading on the research at Queen’s School of Medicine, Dentistry and Biomedical Sciences said: “While chemotherapy drugs are highly effective in treating a wide range of tumours, they can also cause irreversible damage to the heart. This means that doctors are restricted in the doses they can administer to patients. In recent years, scientists have been searching for new drugs to prevent these side-effects.

“Although we have known about the NADPH oxidase enzyme for many years, until now, we were not aware of its crucial role in causing heart damage associated with chemotherapy. Our research findings hold clear potential for the creation of new drugs to block the action of the enzyme, which could significantly reduce heart damage in cancer patients.

“Ultimately, this could allow for the safer use of higher doses of chemotherapy drugs and make the treatment more effective against tumours. Despite improved treatments, cancer is currently responsible for 25 per cent of all mortality in the western world. By reducing the risk of heart failure associated with chemotherapy, patient survival rates could be significantly increased.”

Scientists at Queen’s are now concentrating their efforts on further studies to define the precise role of NADPH oxidase in the development of heart failure associated with cancer therapies. It is hoped that these may lead to the development of a drug which would have the potential to save lives among cancer patients.

The research by Dr David Grieve and Professor Barbara McDermott was funded by the British Heart Foundation in Northern Ireland and published in leading international journal, Cancer Research.

This ethically-approved research was sponsored by the Public Health Agency R&D Division and the European Social Fund and was made possible by the kind donations, following informed consent, of airway epithelial cells from children undergoing elective surgery in the Royal Belfast Hospital for Sick Children.

A central theme of the research in Dr Ullman Power’s laboratory in the Centre for Infection and Immunity (CII) is to try to understand how respiratory viruses interact with human lung tissues and cause disease. To do this, his research group, in collaboration with Prof Mike Shields and Dr Liam Heaney (both of CII), established novel models of respiratory virus infections based in well-differentiated paediatric primary bronchial epithelial cells (WD-PBECs). These cultures look and behave like normal bronchial epithelial tissue in the lungs and provide an excellent and highly relevant platform with which to pursue their research goals.

As part of this research program, Dr Remi Villenave, a Postdoctoral Research Associate in Dr Power’s laboratory, was first author on a paper recently published in the Journal of Virology*, the preeminent journal for original research in the field of Virology. This paper comprehensively described the consequences of Sendai virus infection of WD-PBECs. Sendai virus is a mouse respiratory virus that is of significant interest as a vector for vaccines or gene therapy in humans. One of the images generated for this publication (see right) was selected by the journal publishers (American Society for Microbiology) to adorn the front cover of the last edition of 2010 and its quality was highly praised by the Production Editor.

CII RESEARCHERS’ IMAGE OF SENDAI VIRUS FEATURES ON COVER OF TOP JOURNAL

(Copyright © 2010, American Society for Microbiology. All Rights Reserved.) Sendai virus does not infect goblet cells in well-differentiated primary pediatric bronchial epithelial cell cultures. En face view (upper) and orthogonal section (lower) of a well-differentiated primary pediatric bronchial epithelial cell culture infected with a recombinant Sendai virus expressing enhanced green fluorescent protein. MUC5AC staining (red) of goblet cells shows that Sendai virus does not infect this cell type. Image reproduced with permission.
RESEARCH HIGHLIGHTS

LATE DIAGNOSIS IS MAJOR FACTOR IN HOSPITAL CANCER DEATHS

Late cancer diagnosis in Northern Ireland contributes to hospital deaths despite patient’s preference to die at home according to a major report launched at Queen’s.

The study conducted by the Northern Ireland Cancer Registry and funded by the Ulster Cancer Foundation found that while patients who die in hospital with cancer are very ill, late diagnosis of their cancer is a major factor in hospital cancer deaths here. This is the first ever study in Northern Ireland specifically investigating why cancer patients die in acute hospitals.

Over half of patients recorded preferred to die at home, yet in Northern Ireland the majority (45 percent) of cancers deaths occurred in hospital and only a third of patients died at home (12.5 percent die in hospices and 8 percent in nursing/residential or care homes).

Why Cancer Patients Die in Acute Hospitals examined patient hospital records for 695 cancer patients who died in hospital in the last six months of 2007. It investigated the time from diagnosis to death as well as the preferred place of death in comparison with actual place of death.

The report found the following:

- Over a quarter of all deaths in Northern Ireland are due to cancer, accounting for approximately 4150 deaths per year.
- The average age of patients who had cancer and died in hospital was 74 years. The average time from diagnosis to death was 4 months with one third dying within one month of diagnosis.
- Cancer registry data shows that overall in 2007 one in eleven of all cancer patients died within one month of diagnosis, which points to a general problem of late diagnosis of cancers.
- Most of the late diagnoses were cancers of the lung or digestive organs and were more likely to occur in older, non-partnered patients.
- Almost forty per cent of patients who died in hospital, had specifically requested to return to their usual residence. For three-quarters of cases, their condition deteriorated and a return to home was not possible. There was a lack of a suitable bed for 12.4 percent and the necessary care package was not in place for 4.9 percent. 3 percent lacked the required family support.
- The proportion of cancer patients dying at home has decreased significantly from 38.1 percent (1983-1992) to 32.1 per cent in 2003-2007, however more now die in nursing homes which in many cases is their home.
- Cancer deaths occurring at home varied significantly across Local Government Districts and ranged from 24 percent in Newtownabbey to 46.9 per cent in Magherafelt. There was a similar significant variability in the proportion of hospital deaths by Local Government District, which ranged from 36.3 per cent in Strabane to 62.9 per cent in Ballymoney.
- A cancer death at home was more likely for males, patients that were partnered, patients from deprived backgrounds and younger patients.

The report also makes a number of recommendations, which include:

- A major initiative to improve earlier recognition of cancer symptoms among both the public and healthcare professionals.
- Nursing homes should be specifically targeted for training in early recognition of cancer symptoms and have strategies developed to enable residents with cancer to die in their preferred place of death.
- For the approximate 20% of patients whose condition would have allowed a return to usual residence (to die in their place of preference), efforts should be enhanced to ensure facilities and resources in the community are available to support patients and their carers.
- Further work is recommended to study what helps to facilitate a home death for cancer patients nearing end of life.
- The report highlights the importance of the recommendations made within the 2010 Palliative and End of Life Care Strategy for Northern Ireland (DHSSPS, 2010) and recommends that these should be included in training and in appropriate protocols for professionals who work with cancer patients.

Dr Anna Gavin, Director of the Northern Ireland Cancer Registry, said: “The findings of this study are significant as they identify the good work that is ongoing in palliative care but also highlights areas in need of improvement. The report highlights a need to address the problem of late diagnosis of cancer. N. Ireland is one of 12 areas working in a major international benchmarking project to determine reasons for late cancer diagnosis with the aim of improving survival to this end and a population survey on cancer awareness is due to take place here in May/June.”

Roisin Foster, Chief Executive of the Ulster Cancer Foundation, said: “The Ulster Cancer Foundation is very pleased to have been able to fund this research by the NI Cancer Registry. Its findings have the potential to promote earlier diagnosis of cancer among older people. It also points to improvements in community services that would enable more people to have their final wish to die at home honoured. This research was funded by donations from the Northern Ireland public. Our supporters can be assured that their generosity is making a real difference now and in the future.”
PUBLIC INVITED TO HELP INFLUENCE CANCER RESEARCH IN NORTHERN IRELAND

The Northern Ireland Cancer Trials Centre (NICTC), formerly known as the Northern Ireland Cancer Clinical Trials Unit, launched its new name, logo and web-site in March.

The co-ordinating centre for cancer clinical trials in N. Ireland, NICTC based at Belfast City Hospital, is a joint project between Queen’s and the Belfast Health and Social Care Trust. The work of the Centre is funded by the Health and Social Care R&D Division of the NI Public Health Agency and by the charities Cancer Research UK and the Friends of the Cancer Centre.

£800,000 PUMPED INTO QUEEN’S HEART RESEARCH IN THE CENTRE FOR VISION AND VASCULAR SCIENCE

Researchers in the Centre for Vision and Vascular Science are working towards new therapies to prevent irregular heart rhythms - known as cardiac arrhythmia - following a £200,000 grant from the British Heart Foundation (BHF) Northern Ireland.

Over the past two years the BHF Northern Ireland has pumped almost £800,000 into research at Queen’s to tackle heart disease, Northern Ireland’s biggest killer.

Dr Anthony Collins, from the Centre for Vision and Vascular Science is leading the new research project.

He explained: “The pumping action of the heart has to be very regular in order to pump blood around the body efficiently. In a diseased heart this pumping action can become irregular which means the blood is not delivered to the vital organs.

“This research is looking at the changes that take place in the muscle of a diseased heart – the changes that cause the irregular heart beat. Our long-term aim is to look at ways of making the heart muscle better by developing gene or drug-based therapies.

“Our team is determined to do its part in translating the generosity of British Heart Foundation Northern Ireland supporters into real advances in cardiovascular medicine and we are also committed to enhancing Queen’s reputation as a world leader in biomedical research.”

The Queen’s team includes Dr David Bell, Dr David Grieve, Professor Barbara McDermott and Dr David Simpson.

Marjory Burns, BHF Northern Ireland Director said: “Thanks to the generous donations of our supporters across the UK we’re able to fund vital research to fight diseases of the heart and circulation. Funding to local researchers supports our ever-increasing portfolio of world-leading research to improve prevention, diagnosis, treatment and care of heart disease.”
QUEEN’S LEADS NEW PARTNERSHIP TO DELIVER WORLD-CLASS MEDICAL EDUCATION

Belfast Health and Social Care Trust has been nominated a Queen’s University Hospitals Campus in recognition of its contribution to delivery of a world-class training system for Northern Ireland’s future doctors.

And seven hospitals – Altnagelvin, Antrim, Causeway, Craigavon, Daisy Hill, Erne and Ulster – have been awarded Queen’s University Teaching Hospital status, in recognition of their major contribution to medical education.

The new arrangements, announced at the launch event on 17 February, include the creation of educational sub-deaneries in each Trust to co-ordinate and implement the delivery of the undergraduate clinical educational programme within the Trusts.

The sub-deaneries, and their close partnership with Queen’s Medical School, will ensure that the NHS is able to engage fully in undergraduate medical education.

The initiatives – part of a major new partnership between the University, Northern Ireland Department of Health, Social Services and Public Safety, and local Health Trusts – will ensure an integrated approach to medical education across Northern Ireland.

Queen’s Vice-Chancellor Professor Peter Gregson speaking at the event said: “Today’s announcement re-affirms the position of Queen’s Medical School as a leading provider of medical education in the UK and Ireland.

“These developments provide an integrated framework which enables clinical academics and health service clinicians to work in partnership to deliver the highest standards of medical education. They also specifically recognise the role of Northern Ireland’s acute hospitals, which perform a critical role in delivering high-quality clinical placements for our students.”

Professor Patrick Johnston, Dean of School, said: “The Medical School at Queen’s is driven by a commitment to enhance and improve the quality of life and health care provision for patients across Northern Ireland.

“The designation of Queen’s Teaching Hospitals and the development of educational sub-deaneries within the NHS Trusts reflects this commitment, by creating a world-class educational structure and training system for our future doctors.”

Professor P Johnston, Mr M McGimpsey (Former Minister for Health), and Professor P Gregson pictured at the launch event.
EASING THE SCHOOL TO UNIVERSITY TRANSITION: IMPROVING AND ENHANCING THE UNDERGRADUATE EXPERIENCE

On the 18th and 19th of April 2011, over 400 sixth formers from across Northern Ireland attended an innovative program designed by the Centre for Biomedical Sciences Education to explore and support student transition from second level to tertiary level education. First year in any university is regarded as instrumental in laying the foundations for future academic success. Unfortunately this is also a time that is traditionally regarded as problematic as students are required for the first time, to take full responsibility for their own learning. At school, most students are used to small classes, a significant level of individual attention from teachers and structured study plans. When they arrive at university, students may find themselves in classes of between one and three hundred and must assume responsibility for their own learning. While many students relish this independence, others are daunted by it. A major problem associated with moving from a small class to large lecture environment is that the anonymity of large classes fosters a sense of detachment that in some students results in non-attendance. Many students are unused to organising their own study, and may feel they have nobody to ask for help. Also, because their study is no longer specifically guided by a teacher they may lack motivation and direction.

The two one-day programmes organised by the Centre for Biomedical Sciences Education aim to pre-empt these difficulties and initiate the process of an independent and proprietorial attitude towards study before students enter their undergraduate career. At these events, in addition to attending lectures and practicals, secondary school pupils were placed in small focus groups to investigate and discuss changes in student learning styles as they prepare to move into a different phase of their academic development.

Dr Aisling Keane of the Centre for Biomedical Sciences Education said, “Research published by the Higher Education Academy for Biosciences suggests that a key factor relating to student dropout of higher education is their ability to cope with independent learning. Through this innovative Secondary to Tertiary Transition Programme, the Centre continues to support, develop and invest in the future of undergraduate students by preparing prospective first year entrants for the academic challenges ahead.”

SCHOOL INTRODUCES NEW MSC IN COMPUTATIONAL BIOLOGY

The past decade has seen an enormous progress in molecular and biomedical technology. Managing and analyzing this huge amount of data is a challenging task. Further demand for specialists in Computational Biology can be expected from advances in Personalised Medicine. Particularly in this area statistical and computational methods have proven to be useful in recent years. In response to this demand the School of Medicine, Dentistry and Biomedical Sciences at Queen’s is offering a new Master of Science degree programme in Computational Biology, starting in September 2011.

The programme which is available as a one year, full-time programme covers Cell Biology (2-weeks short course at the beginning of Semester A); Scientific Programming and Statistical Computing; Genomics and Genetics; Bioimaging Informatics; Algorithmic Biology; Statistical Biology; Analysis of Gene Expression; Research Project (Dissertation). Students completing the programme will have the necessary skills and knowledge to undertake research and development in industry (Biotechnology, Pharmaceutical Companies), medical research centres and in academic institutions. For further information on the new MSc in Computational Biology and our other postgraduate taught programmes visit the School’s Postgraduate and Professional Development Office website http://www.qub.ac.uk/schools/mdbs/ProspectiveStudents/pgd/PT/
EDUCATION HIGHLIGHTS

QUEEN’S AWARDED FOR BREAKING DOWN COMMUNICATION BARRIERS

Queen’s and RNID Northern Ireland have won a national award for their work in ensuring future doctors are better equipped to communicate with deaf patients.

Queen’s School of Medicine, Dentistry and Life Sciences received the Organisational Achievement accolade at the annual Signature Awards for its Specialist Module on Deafness. The awards, hosted by leading deaf charity Signature, recognise those who have made a significant contribution towards achieving a society in which deaf and deafblind people have full access to society.

Second year medical students at Queen’s are offered the specialist module which is delivered by the RNID in British Sign Language (BSL). It ensures that future doctors are better equipped to communicate with deaf patients, and includes information on deaf awareness, deaf culture and healthcare issues for people who are deaf or hard of hearing. Students also work to develop a health-related video British Sign Language Directory.

Speaking at the awards, Signature Chief Executive Jim Edwards said: “Queen’s University Belfast has shown great commitment to helping the deaf community overcome communication barriers, and great credit should go to the team. These vital skills will ensure a legacy of inclusiveness for deaf patients in Northern Ireland. They thoroughly deserve the recognition this accolade brings and should be very proud.”

Following the success of the module, both Queen’s and the RNID now intend to make the module available to all healthcare-related undergraduates at the University, through the development of a website funded by the Higher Education Academy.

Dr Jayne Woodside of the Centre for Public Health, who runs the specialist module and is developing the new website, said: “This course is an important opportunity for medical students to develop deaf awareness and communication skills, and we are very keen to both maintain and develop these links with RNID. Following its success, in the future, we are planning to make our new website available to undergraduates in all healthcare disciplines.”

Director of RNID NI, Brian Symington added: “We are campaigning for improved access to healthcare for people who are deaf or hard of hearing. Having doctors who are able to communicate effectively with their deaf and hard of hearing patients is a major step forward in making healthcare services in Northern Ireland accessible. The success of this course is due to the excellent partnership working between Queen’s, RNID and Signature.”

MITCHELL SCHOLARS VISIT CCRCB

CCRCB hosted a visit from students participating in the Mitchell Scholarship Programme as part of the US-Ireland Alliance on 25 February 2011. The US-Ireland Alliance is a proactive, non-partisan, non-profit organisation dedicated to consolidating existing relations between the United States and Ireland, North and South, and building that relationship for the future. The US-Ireland Alliance has established the George J. Mitchell Scholars Program to educate future American leaders about the island of Ireland and to provide tomorrow’s leaders with an understanding about, an interest in, and an affinity with, the island from which thirty-eight million Americans claim descent. Approximately twelve scholarships are awarded each year. Every year twelve highly-qualified students are selected to complete a degree at an Irish institution.

Senator Mitchell was previously Chancellor of the University and officially opened the new CCRCB building in November 2007. The visiting scholars were introduced to the Centre by CCRCB Deputy Director, Professor Kevin Prise and then given a tour of the Second and Third Floors by Karl Butterworth and Kirsty McLaughlin.
FIRST AID TRAINING FOR MEDICAL AND DENTAL STUDENTS

Queen’s University, in collaboration with the British Red Cross, has become the first medical school in the UK to provide compulsory first aid training, resulting in the award of a First Aid certificate, to over 320 first year medical and dental students. Red Cross trainers deliver a seven hour, Basic First Aid course in two sessions, which covers a wide range of essential, life-saving skills.

The move follows a successful three-year pilot, which saw the British Red Cross provide an optional training module to the school’s third year students. Feedback from this pilot revealed that the acquisition of first aid skills was rated highly by participating students.

Course Director, Dr Nigel Hart, explains why the medical school was so keen to ensure that all students received first aid training during their first semester; “We have been eager to include a compulsory first aid module for students for a number of reasons. We have seen how the training gives students greater confidence in dealing with unexpected situations, even at an early stage in their medical and dental careers. In addition, the provision of first aid training to medical students was a key recommendation of the GMC’s ‘Tomorrow’s Doctors’ report of 2009, and this is our response to that recommendation.”

Medical student, Mary Elizabeth Finnan, said: “I found the first aid training very beneficial as a first year medical student. After completing the course I feel confident to react in emergency situations, which is essential as I am studying medicine. I thoroughly enjoyed the course and found the first aid trainers extremely helpful.”

Paula Powell, the Red Cross’ Project Manager for community based first aid, said: “We’re delighted to be working so closely with Queen’s Medical School. Of course we believe that first aid is a skill that everyone should learn. You don’t have to be a medical professional to provide appropriate help in an emergency and we’d encourage ordinary members of the public to either enrol for one of our courses, or at the very least, to go to the Red Cross website and read up on some basic common-sense advice that could make all the difference in a crisis.”

Nigel’s work in developing the new programme was recognised at the School’s Annual Celebration of Excellence (see Page 19).
EDUCATION HIGHLIGHTS

MASTERS OF RESEARCH (MRES) IN MOLECULAR MEDICINE – FIRST COHORT STUDENT TALKS ABOUT BENEFITS FOR HIS FUTURE CAREER

In our last edition we introduced the Masters of Research in Molecular Medicine which was launched in September 2010. Brendan Wright, a fourth year medical student, has taken a year out from his medical studies to join the first cohort of students (Ben Loughrey, Grace Cuddy, Anita Lai Wa Li, Fionna Burns and Louise O’Hare) undertaking the new programme. Brendan (pictured below) who joined Dr Denise Fitzgerald’s team in the Centre for Infection and Immunity, gave us some insight into the reasons for choosing the MRes programme and the benefits for his future career.

“The Masters of Research in Molecular Medicine (MRes) appealed to me because it is designed to provide students with a better understanding of how scientific research translates into clinical medicine. Working in a laboratory has given me technical skills that will be useful in the future if I decide to undertake an MD or a PhD. I was initially trained by other members of my team including PhD students and post-doctoral research associates. I was soon able to work independently on my project and take it in the direction that I wanted. My project was based on organotypic hippocampal slice cultures, an in vitro model of the central nervous system (CNS). Using this model I was able to test the effect of a protease inhibitor on chemical-induced CNS demyelination. This required tissue culture, immunohistochemical staining and image analysis. The work that I have done is the beginning of a larger project that will examine the effect of protease inhibition on the processes of demyelination and remyelination, which are important events in the progression of multiple sclerosis and other demyelinating diseases.”

“My time in the lab has allowed me to interpret and discuss up-to-date research articles in the fields of neurology and immunology on a weekly basis. I was able to critically analyse research articles on a more independent basis and because of this I now feel more confident in assessing new scientific findings and their relevance to clinical medicine. Other modules in the MRes degree, particularly genomic medicine, have provided me with knowledge that is relevant to the future of medical practice. This is useful given that doctors frequently report genomic medicine as an area in which they feel their knowledge is inadequate and in which they want to improve. A module on designing clinical trials was also very relevant and useful. I feel that the MRes degree has provided me with the knowledge and skills to be able to contribute to advancing scientific and medical research at the forefront of clinical specialties in my future career.”

Brendan Wright (4th year medical student)
MDBS IN THE COMMUNITY

RUGBY MATCH RAISES MONEY FOR QUEEN’S UNIVERSITY RED CROSS

After the exertions of the semester 1 exams, a keen group of first year medical and dental students formed a rugby team; and threw down a challenge to take on all comers.

The first opponents for this young mix of experienced rugby heads and eager rookies were of course the second years. It was a match up that would no doubt place reputations and bragging rights on the line for the rest of the year, and it promised to be a good one.

Not a lot was known about the highly secretive second year line-up, which added to the anticipation of the game. The date had been set and shirts had been printed: the game was on.

It was at this stage that the newly formed first year society Q.U.R.C (Queen’s University Red Cross), also formed early in the New Year, approached the team proposing that the match be a fundraiser for humanitarian aid. Lecture shout outs were made, and supporters rounded up, ready and eager to watch a great match for a more than worthy cause.

The game took place in glorious weather at Queen’s Playing Fields on the 16th of March. Both sides had been training hard for weeks to organise their scratch teams into seamless units, with the goal of playing athletic, skilful rugby. Led by 1st year captain Peter McCluggage and 2nd year captain Karl Love the teams burst on the field, and into an electric atmosphere, cheered on by hundreds of student supporters. With an early try from grizzled veteran Jack “postgrad” Adams, some spectators were heard expressing doubts whether this was a ‘freshers’ team, or rather a ‘world select’. Further tries came from McConville, Clements and Horner; and braces from Paddy McKee and Caneborg added to the team’s success. On the defence the freshers tackled with complete ferocity, with big hits from Steenson, McCaughey, Irwin, Hucks and Brown. The only breakthrough for the 2nd years came from a clever play upfield, leading to a try to reduce the growing arrears of the more senior medics . However, this did nothing to change the result with the final score 1st years 46 - 2nd years 5!

Special mention must go to GAA converts Dugan and McGivney, rugby novice Ahmed Amer and to Jamie Clements for playing on heroically with what turned out to be a badly broken finger.

The seeds of rivalry, but also of good sportsmanship have now been deeply sown within the Medical School, and a rematch between the two teams will no doubt ensue. A great start to the Saint Patrick’s Day holiday enjoyed by all who attended the Match, whether to enjoy a good game of rugby or just for the ice cream and superb weather that was on offer as well!

A final congratulations and special thanks must be made to all those who donated to Q.U.R.C on their first fundraising appeal with £190 in total raised from the event!

Thanks to QURC members, Joe Dugan, Peter McCluggage (Rugby Captain) and Aidan Bannon (QURC President) for the article!

RESEARCHERS REWARDED FOR PUBLIC ENGAGEMENT ACTIVITIES

Congratulations to Dr Kienan Savage and Gaurang Patel both of whom have received recognition for their public engagement work in 2010. Dr Savage was nominated by the Belfast Media Group for one of its “Top 40 under 40” awards for his work chairing the Belfast Relay for Life for Cancer Research UK which raised over £12,000 for the charity.

Gaurang Patel was one of ten researchers who took part in several engagement activities for CR-UK during the year and in a draw at the researchers’ annual thank you breakfast, he received a voucher for a meal for two, compliments of Villa Italia.

Cancer Research UK now supports more than fifty researchers within CCRCB and the Northern Ireland Cancer Trials Centre, most of whom regularly get involved in events to raise awareness of the Belfast Cancer Research UK Centre and its work locally. A big thank you is due to everyone who gets involved, as public engagement is vital to build loyalty and increase income for CR-UK in Northern Ireland.
STUDENT NEWS

SUMMER STUDENTSHIP SUCCESS FOR FINAL YEAR DENTAL STUDENT

Each year the School of Medicine, Dentistry and Biomedical Sciences funds up to 47 summer studentships across its education and research centres. These studentships are intended to provide undergraduate medical, dental and biomedical science students with the opportunity to work on a dedicated project and to foster an interest in pursuing a career in research. Many of our summer students go on to study for PhDs.

Katherine O’Donnell, a final year dental student in the School of Medicine, Dentistry and Biomedical Sciences, has been awarded an international prize for research. Katherine undertook a summer studentship last year in the Centre for Infection and Immunity supervised by Dr Fionnuala Lundy. Katherine’s research project was selected to represent Ireland in the Hatton/Unilever competition at the International Association for Dental Research conference in San Diego. Katherine was funded by Unilever to attend the meeting and was awarded runner up position in the prestigious international competition for her project entitled ‘The role of LL-37 in periodontal wound healing’. Dr Lundy said ‘This is a tremendous achievement for Katherine and demonstrates the standard of work that can be accomplished during a summer studentship. Katherine’s work has important implications for our future research on the role of host defence peptides in the proliferative and remodelling phases of wound healing’. Katherine is the third undergraduate student in Dentistry to win an award in the Hatton/Unilever competition in the past 8 years. Dr Chris Irwin, Centre for Dental Education, commented ‘Katherine’s success is highly commendable and completes a remarkable hat-trick of successes for Queen’s University Dental School in the most prestigious international awards competition in dental research.’

PHD STUDENT IN THE CENTRE FOR INFECTION AND IMMUNITY WINS THE EVERETT C FOX MD AWARD

Dr Donal O’Kane has recently won the prestigious Everett C. Fox, MD award for best presentation of laboratory research at the American Academy of Dermatology 69th Annual Meeting in New Orleans. He also won the best poster presentation at the meeting. Donal presented his research on ‘The role of epithelial to mesenchymal transition in scleroderma’. Scleroderma is an untreatable progressive fibrotic disease of the skin and often internal organs. Donal’s results support EMT as a pathogenic mechanism for fibrosis in scleroderma and highlight the SMAD signalling pathway as a key therapeutic target. Donal is currently a 2nd year PhD student supervised by Dr Cecilia O’Kane, Prof Danny McAuley, and Prof Stuart Elborn. His work is funded by the Health and Social Care, Research and Development Division.
A Queen’s medical student has returned home from the United States after assisting with preparations for the final ever mission by the Endeavour Space Shuttle.

Therese White, who is in her fourth year of Medicine at Queen’s, won a place as the only UK student on an internship at the Kennedy Space Centre (KSC) in Florida. The placement, through the Aerospace Medicine and Occupational Health Branch of the KSC, provides a unique opportunity to learn about the field of Aerospace Medicine at an operational space centre.

The internship coincided with the preparation of the launch of the final mission by the Endeavour Space Shuttle which returned to earth on the 1st of June, 2011. Therese and the team assisted with the medical preparation in the lead up to the launch as well as getting an insight into the emergency contingency plans for any disaster which might occur.

Speaking on her return Therese White said: “I am honoured to have been selected as the only student in the UK and the first in Ireland to take part in the medical elective programme with NASA. I was given a wonderful insight into the field of research, particularly with regards to extreme condition microgravity. I have a keen interest in becoming involved with medical education and I hope to use my experience with NASA to create a stimulating and productive learning environment for future medical students.

“To be involved in the preparation of the last ever mission of the Endeavour Space Shuttle is an experience which could not be replicated. I have been offered the opportunity to go back over and be involved in research programmes with sponsorship, which I hope to do next year or after graduating.”
PROFESSOR ALAN STITT RECEIVES ROYAL SOCIETY WOLFSON RESEARCH MERIT AWARD

One of Northern Ireland’s leading scientists has received a top UK award, to support groundbreaking research into vascular stem cells and eye disease in the School’s Centre for Vision and Vascular Science.

Professor Alan Stitt, McCauley Chair of Experimental Ophthalmology and the Scientific Director of the Centre, has been awarded the prestigious Royal Society Wolfson Research Merit Award. The award supports respected scientists of outstanding achievement and potential, with the aim of retaining their expertise within the UK. Only 30 of these awards are made each year to researchers in all areas of the life and physical sciences, including engineering.

On receiving the award Professor Stitt said: “This links to my research in the area of vascular stem cells and treatment of important sight-threatening eye diseases. At Queen’s, we hope to continue to make significant discoveries in this field and improve the treatment of eye diseases for those with diabetes.”

He added: “As an individual, it is very flattering to be recognised in this manner but this also reflects the talent and hard work of my research team. This Merit Award also underscores the excellent environment and international standard of research in the School of Medicine, Dentistry and Biomedical Science at Queen’s.”

This Merit Award will support Professor Stitt’s research in the area of vascular stem cells and treatment of important eye diseases such as diabetic retinopathy. This research is pioneering the application of “cell therapy” using a very rare population of cells that promote repair of damaged blood vessels within the retina.

The award is presented by the Royal Society and jointly funded by the Wolfson Foundation and the UK Office of Science and Technology.

SCHOOL APPOINTS NEW DIRECTOR OF GENDER EQUALITY

It may surprise you to know that, of just over 500 staff in the School of Medicine, Dentistry and Biomedical Sciences, almost 60% are women. So, to establish and publicize the School as the women-friendly place that it is, an important new position of Director of Gender Equality has been created. The Director will work with the School and Centres’ Leadership to formulate and deliver an equality plan for the School. On being appointed to this post, Professor Barbara McDermott said ‘I consider taking the gender equality enterprise forward as a worthwhile job to do. Working alongside a dedicated group of people, I look forward to promoting the visibility of women’s careers.’

The University has a Queen’s Gender Initiative office on the main campus and the team there has done sterling work over many years to improve career pathways for women. It is recognised, however, that there are special challenges for women in bioscience and medicine, and so it is timely that a dedicated Gender Equality office is being set up in the School. This will create a more focused effort on addressing culture change in what is a large and complex unit within the spectrum of SET Schools and the wider University. Along with other senior women in the School, including Professors Cosby, Ennis and Lewis, Professor McDermott has been involved in the activities of QGI since it was formed in 2000, and has continuing roles in the QGI Executive Committee, Local Academic Women’s Network, the mentoring programme and delivery of postgraduate training courses. She worked as Acting Director of QGI for part of 2010 with major responsibility for renewal of the University’s SWAN award, which recognises and celebrates good employment practice for women working in SET in higher education and research. Individual Schools can also apply for a SWAN award and this will be one of the targets to work toward in the following year. It is likely that a SWAN award will make a convincing contribution to describing our ‘environment’ for REF2014.

But the current impetus is about developing positive existing activities and extending them, particularly around postgraduate/postdoctoral aspirations, academic recruitment, retention and progression, and representation of women in senior roles. Essentially it is about building confidence, enabling women to be partners, mothers and carers, and supporting systematic investment in career development. And this is not all just about women advocating women. It is important that men are included as part of the process, in support networks, as coaches or mentors or even as role models. Men too could benefit, for example from any staff development opportunities that arise from the gender equality programme. It has been said that gender-rich partnerships are essential for a thriving organization and it is indeed true that ‘women matter’.

Editor’s Note: Queen’s has emerged as Northern Ireland’s top employer for women, and one of only two universities to feature in the UK’s top 50 workplaces for female staff. For further information see http://www.qub.ac.uk/home/TheUniversity/GeneralServices/News/PressReleases/
Over 150 staff, students and invited guests attended the School's Annual Celebration of Excellence on 25 March 2011. The celebrations commenced with the presentation of the Distinguished Graduate Award to Dr Jack Kyle. The Award which is given by the School in recognition of a graduate's outstanding contribution to their field (practice, education or research) and/or for being an outstanding role model for the profession. Jack graduated in Medicine from Queen’s in 1951 and spent more than 30 years working as a consultant surgeon in Zambia.

He is also more widely recognised on the world stage as a rugby legend who played for Ireland, the British Lions and the Barbarians during the 1940s and 1950s. The highlight of his Ireland career came during the 1948 Five Nations Championship when he masterminded Ireland’s grand slam victory. In 2001 he was awarded an Honorary Doctorate by Queen's and in 2007 he received a Lifetime Achievement Award from the Irish Journal of Medical Science and the Royal Academy of Medicine in Ireland. Jack continues to support rugby and the University through The Jack Kyle Bursary Fund which was established in 2001 to support Queen’s Rugby Academy.

The Annual Celebration of Excellence is held each year to celebrate the achievements of staff and students in the previous year. This year Dr Jack Kyle presented awards in 10 categories celebrating excellence in education, research and professional support including recognising the achievements of our best undergraduate and postgraduate students, postdoctoral researchers, academic and academic support staff.

The Dean of School’s award for outstanding contribution went to Professor Alan Stitt in the Centre for Vision and Vascular Science for his significant contribution to research, including his leadership of the successful Wellcome-Wolfson Capital Awards Initiative bid which was featured in the winter edition of MDBS News. In addition to School and University staff, Professor Johnston also welcomed and took the opportunity to thank our major external partners and stakeholders. Full details on the ceremony and award recipients are available from the School website.
Professor Patrick Johnston, Dean of the School of Medicine, Dentistry and Biomedical Sciences and one of the world’s top cancer clinician scientists has been appointed Chair of the Translational Research Group of the Medical Research Council (MRC), which is responsible for developing and implementing the MRC’s research strategy in the UK, investing in high-quality medical research across a wide range of diseases and disciplines.

Announcing the appointment at Queen’s University, Sir John Savill, Chief Executive of the Medical Research Council, said: “Professor Johnston’s appointment is extremely important. The role as chair of the Translational Research Group is key to its success in the UK, which is one of our main objectives. The MRC has to deliver the economic benefits from its investments and getting the right strategy to achieve that is essential. Professor Johnston is very committed to translational research; he has particular expertise in cancer and is clearly someone who has chosen a very receptive translational research environment at Queen’s.”

Commenting on his appointment, Professor Johnston said: “This appointment is not only an honour for me but also for Queen’s University and Northern Ireland. It is also a major recognition of the research work undertaken in the School of Medicine, Dentistry and Biomedical Sciences.

“It will allow me to further develop translational research across the UK and also direct research at Queen’s into areas that will be more successful.”

Professor Peter Gregson, Vice-Chancellor of Queen’s University, said: “Queen’s University is delighted that Professor Johnston has been honoured through his appointment to this key strategic role within the Medical Research Council. It is testament to his research reputation and his contribution, made through Queen’s, in the area of translational research. Importantly, it places Northern Ireland at the heart of strategy and policy development in the MRC.”

The project aims to establish a unique CancerScape web portal, to illustrate the visual complexity of cancer tissues and cells, using high resolution web-microscopy. Images will be selected, annotated and described by experienced diagnostic pathologists in lay-mans terms. In addition, images will be described through poetry or prose provided by local English A Level students from schools in Northern Ireland. A dedicated website will be developed to professionally present this material and PathXL will be used to manage and deliver high quality microscopy images to the general public using virtual microscopy. This project will provide a unique insight into the beauty of microscopy images but also their importance for cancer diagnostics and in so doing blur the lines between art and science.

ROYAL MICROSCOPICAL SOCIETY VICE-PRESIDENT’S FUND 2010 PRIZE

The Royal Microscopical Society Vice-President’s Fund 2010 prize was awarded to Stewart Church from the Centre for Cancer Research and Cell Biology by Professor Tony Wilson, RMS President, on 27 January 2011 for their project entitled: “CancerScapes: the complexity and richness of cancer microscopy”. The RMS Vice-President’s Fund supports worthy projects using microscopy to contribute to the public understanding of science or benefit the developing world. This is the first time that the RMS Vice-President’s Prize has been awarded to Northern Ireland.

IMAGINE WHAT YOUR LEGACY CAN DO

Has Queen’s University made a difference to your life and that of your family or friends?

For generations Queen’s has been recognised as a centre of excellence in teaching, learning and discovery.

With planned changes to Government funding, legacy gifts to Queen’s are vital for the University to remain a world-class Institution and to meet the long-term challenges ahead.

After you safeguard your family and friends, you may wish to make a special bequest to a charity. If this is the case, we would like you to consider making a bequest to Queen’s University Belfast. Your legacy to Queen’s is personal to you and will make a difference - helping fund medical research, endow scholarships, build library resources, or support capital projects.

Your bequest to Queen’s demonstrates that Queen’s has made a difference to you and that you care about the future of the University.

If you would more information, please contact Susan Wilson-Legacy Manager on 028 9097 3114 or susan.wilson@qub.ac.uk.