

Primary Care

Professor Bob Stout, Director of Research and Development for the HPSS

Primary Care is by far the largest component of the Health & Personal Social Services, at least 80% of consultations taking place in primary care. Primary Care has always been important in the delivery of health & social care but is now becoming more central in both its management and delivery. It is essential therefore that research should be based in primary care and research into primary care should also be supported.The R&D Office is committed to promoting and supporting research both in and on primary care.

There are some structural and organisational difficulties in undertaking research in primary care. The first is that the service is dispersed throughout the community and there are not the concentrations of professionals that occur in secondary care. Second, by its nature, it is general and primary care practitioners have to be able to deal with a wide range of health and social care problems. Successful research is usually focused, looking at certain areas in depth. Marrying the focus needed for research with the generality of primary care is proving difficult. Third, in comparison to the extent of primary care and the number of professionals delivering primary care, academic departments in Northern Ireland are relatively small and poorly resourced. There are also relatively few HPSS professionals in primary care who undertake



research or who have the opportunity and the time to do so.

New opportunities for developing research in primary care are arising. The first is the United Kingdom Clinical Research Collaboration (UKCRC), which was described in the Winter 2004 edition of R&D Today. One of the workstreams of the UKCRC is to establish an infrastructure for clinical research and clinical trials in the United Kingdom in the form of clinical research networks. Northern Ireland is participating in this and the R&D Office is developing plans for a number of disease specific networks. Much of the research will take place in primary care and this will provide important opportunities for those in primary care interested in participating in research. The second opportunity is the development of the Medical Research Council's General Practice Research Framework (GPRF) the subject of another article in this edition of R&D Today. Northern Ireland has more practices enrolled in GPRF in proportion to its population than any other part of the UK. The GPRF has in many instances been used as a source of participants for clinical trials run by others. New opportunities are now arising for it to be involved in research in primary care and of primary care. The R&D Office will work with the GPRF to try to marry this with its evolving networks for clinical research. Third, the R&D Office will be developing further the Primary Care Research Forum, established initially by the QUB

Department of General Practice and recently taken over by the Royal College of General Practitioners. This will be developed as a multidisciplinary forum for encouraging, promoting and reporting research in primary care. Fora for other disciplines e.g. imaging have been established and are proving successful in promoting research in their areas.

Another important workstream for the UKCRC is capacity building of trained researchers. One of the recent recommendations of a sub-committee dealing with this has been for two-year training programmes for general practitioners, covering both vocational training and research. In Northern Ireland we already have this in place in the form of the GPARTs Scheme described in another article in this edition of R&D Today. The R&D Office will be looking at the GPARTs Scheme and in particular trying to see how those GPs who have participated in the scheme can be allowed and encouraged to continue their research interests as they develop their careers in general practice. The other education and training schemes run and funded by the R&D Office are of course open to all primary care practitioners and we encourage further applications from primary care to our schemes.

Also described in this issue of R&D Today are three researchers who have received awards from national research capacity building schemes. These are run by the National Co-ordinating Centre for Research Capacity Development, part of the R&D division of the Department of Health in London. The Centre advertises each year for applications for both pre-doctoral and post-doctoral schemes in all of the health & social care professions. These are open to applicants from Northern Ireland and the R&D Office repeats the advertisements in the local press. Applicants from Northern Ireland are considered by the UK panels in competition along with other applicants from throughout the UK. Those from Northern Ireland who are successful are funded by the R&D Office. In general applicants from Northern Ireland have a high success rate but the number of applications is disappointingly low. These awards are both valuable and prestigious and I would encourage more applications from Northern Ireland for this important opportunity.

I hope that this issue of R&D Today devoted to primary care research, will encourage those in primary care to consider research. The R&D Office is available to give help and advice.

Research in Primary Care Pharmacy

Professor Carmel Hughes, Professor of Primary Care, School of Pharmacy, QUB

Professor Carmel Hughes from the School of Pharmacy describes her research interests, some of which have been supported through a National Primary Care Career Scientist award, administered and funded by the R & D Office.

Carmel Hughes is Professor of Primary Care Pharmacy at the School of Pharmacy at the Queen's University Belfast (QUB). She obtained a Pharmacy degree from the School of Pharmacy at QUB and following a year of pre-registration training in hospital pharmacy in Colchester in Essex, returned to QUB to undertake a PhD. Carmel would be the first to admit that her PhD and current research interests have little in common. "My PhD was industry-sponsored, completely labbased and was pure pharmacology. My project evaluated drug interactions using the perfused rat liver as an in vitro model. Although I really enjoyed the work, I had no clear idea what I wanted to do, but I didn't think that I wanted to build a career around rat livers!" Following a year of travel and a further year in community pharmacy practice, Carmel was appointed to a joint post between the School of Pharmacy at QUB and the Eastern Health & Social Services Board in 1993. The University part of the job was teaching and research, while the Board component was the delivery of prescribing advice to general practitioners (GPs). "This was at a time of great change within the Health and Personal Social Services (HPSS); GPs were being offered the chance to become fund-holders and hospitals were becoming self-governing trusts. My role was to analyse prescribing trends in general practice, offer rational and objective advice to GPs, develop formularies and deliver training on therapeutics and practice organization to all members of the primary health care team". It was this 'real world' experience that sparked Carmel's interest in prescribing and primary care research. She was already involved in a number of community pharmacy projects as part of her School of Pharmacy work. In collaboration with Professor James McElnay, Carmel jointly supervised a

number of large trials such as repeat dispensing and the delivery of pharmaceutical care to a range of patient groups in primary and secondary care.

In 1997, Carmel obtained a full-time lectureship in Pharmacy Practice and settled into academic life. However, in October 1998, Carmel received a brochure advertising Harkness Fellowships in Health Care Policy, funded by the Commonwealth Fund of New York City. "James McElnay encouraged me to apply; however, the problem was that I had received the brochure one week in advance of the closing date. I had to complete a detailed application form, devise a 6 page project and secure three referee reports. It was a busy week, but I managed to hit the deadline and then promptly forgot about it. So, it was guite a shock to find out that I had been shortlisted for interview in January 1998. And it was an even bigger shock to be appointed to one of the fellowships". Carmel was the first pharmacist to receive a Harkness Fellowship and she spent one year at the Center of Gerontology and Health Care Research at Brown University, Providence, Rhode Island, under the mentorship of Vince Mor PhD and Kate Lapane PhD. Carmel researched the impact of regulation on prescribing in US nursing homes. "I had a long-standing interest in prescribing in older people and had been aware that the USA had implemented an adversarial system to control the prescribing of certain medications to older people in long-term care, notably anti-psychotics, hypnotics and anxiolytics. These latter drugs had been described as 'chemical restraints' and were used to sedate and subdue residents of nursing homes. My research at Brown indicated that regulation was certainly effective in preventing prescribing of these drugs, but did not always lead to better outcomes." Carmel considers the Harkness Fellowship to be the defining experience of her career to date. "It was such a fantastic opportunity to work with some of the best researchers in the world and to think about things in a very different way. I also had a chance to travel extensively in the USA during the fellowship year to meet with policy experts who could broaden the perspective even more. Perhaps the greatest benefit of that year has been the on-going collaboration with Brown which has resulted in joint grants and publications."

Of course, all good things come to an end and Carmel returned to the School of Pharmacy in 1999. She was very conscious that she had made great strides in terms of research and did not want to lose that momentum. It was at this time that another opportunity presented itself in the form of a National Primary Care Career Scientist Award. These awards are intended to unblock senior research career pathways of the highest calibre individuals in primary care research and development and provided five-year salary support. "Professor Domhnall Macauley (formerly of the University of Ulster) encouraged me to apply for one of these awards, which involved another just-in-time scramble to complete the necessary paperwork. In this case, I had to propose a five year research programme which would be entirely focussed on primary care". In view of Carmel's on-going interest in prescribing, it seemed logical to continue with this theme in the application and Carmel devised a programme of research, which would focus on prescribing in primary care and improving collaboration between GPs and community pharmacists. Another major advantage of these awards is that they will provide support for further research training and attendance at conferences; there is also a stipulation that award holders can only teach up to 6 hours per week. This provides relative freedom to focus almost exclusively on research. Carmel was successful in obtaining one of these awards (the only pharmacist, to date, to do so), which commenced in January 2001. The R&D Office is providing the support for the award. The research programme has entailed: 1) a qualitative evaluation of the relationship between community pharmacists and GPs, with a focus on prescribing; 2) optimising the effectiveness of the community pharmacist in self-care (non-prescription medication); and 3) evaluating pharmacist intervention at a disease level (e.g. cardiovascular disease, notably hypertension and heart failure) or at a patient level (e.g. the elderly in nursing homes). A number of these studies have received external funding support and are supported through PhD or post-doctoral fellowships. Other current projects which fall within the primary care remit include an evaluation of pharmacist supplementary prescribing, an assessment of the implementation of mandatory continuing professional development in pharmacy, studies on the influence of psychosocial factors which influence adherence to medication and an investigation of the impact of deprivation of prescribing in primary care. Carmel's research has been recognized by the receipt of the British Pharmaceutical Conference Practice Research Medal in 2001, which is awarded to individuals who have made a significant contribution to the field of pharmacy practice research.

Carmel was promoted to a Chair in 2004. She attributes her research success to the Harkness

Fellowship and the National Primary Care Award. Her collaboration with American colleagues is continuing. "We have moved beyond the regulatory perspective and have been exploring the impact of organizational factors and reimbursement policies on prescribing trends in US nursing homes. I am also an investigator on a major intervention trial that is currently underway in US nursing homes which is evaluating a new model of care for prescribing, involving closer collaboration between pharmacists and doctors. A similar trial is about to start in Northern Ireland which is using adapted methodology and has been supported through a R&D Office fellowship to Mrs. Susan Patterson." Other collaborations have been established with the University of Manchester (through a Patient Safety Research Network), the University of Aberdeen

(Department of General Practice and Primary Care), and the University of St. Andrews (Department of Management).

"I have been incredibly lucky in my career in that opportunities seemed to present themselves at the right time. I have also been very privileged to work with some great people, notably James McElnay who has always been very supportive of my work. And I am very grateful to the R&D Office which has provided financial support through the Primary Care Award and other research programmes. The research that I have undertaken has been exciting and challenging, but ultimately very rewarding, and a very long way from rat livers!"

The Stroke Offspring Study – A Primary Care research opportunity

by Nigel Hart, Dept of General Practice, Queen's University Belfast

Whilst working as a research registrar in General Practice (a two year appointment) in 2003 I became aware of an opportunity through national R&D to further my research experience and to gain research training. The award is called the National Primary Care Researcher Development Award (PCRDA). It is awarded annually and it undertakes to increase research experience within the Primary Care base. It is open to all professions within Primary Care and there is no quota system for any one profession. The awards are given for up to three years and can be used to fund the pursuit of a higher degree. As well as providing funding for a research study the award also makes provision for research training. I was awarded my PCRDA in July 2003 and started in November 2003.

It was during a Senior House Officer post in Elderly Care medicine in the Royal Victoria Hospital that I became interested in stroke. Stroke is the largest cause of disability in the UK. The management of stroke accounts for 5% of the NHS budget and it has been identified as a priority area for action. The modifiable risk factors for stroke are well documented and it is clear that early intervention in these risk factors reduces stroke incidence. Being a GP I am interested in the challenges of primary prevention. Whilst it is known that there is an increased stroke risk associated with a positive family history, it is not clear whether screening for risk factor prevalence in the children of stroke patients will yield a high prevalence group.

The study in which I am involved is called the Stroke Offspring

Study (SOS). It is a case-control study and it aims to compare stroke risk factor prevalence in families where there is a stroke history against those where there is no stroke history. It is a study which is based in Primary Care and recruits from GP practices across Northern Ireland. The hypothesis of the study is that there is a higher prevalence of stroke risk factors in individuals with a family stroke history than in non-stroke families. The findings of the study will help to inform a potential strategy for primary prevention of stroke. I am currently more than halfway through the data collection phase of the study and can see the light at the end of the tunnel.

As well as funding research the award also funds research training and I have been able to take advantage of several statistical and research training courses. I am enrolled in an MD through Queen's University Belfast and have taken the opportunities through my involvement in the Department of General Practice there to broaden my research knowledge and to engage in other research activities.

Whilst there is no data to publish as yet, I hope by the end of the summer to have completed all data collection and to be in a position to start data analysis. I would like to express my gratitude to the R&D Office and to Dr Domhnall McCauley, Dr Margaret Cupples and Professor Carmel Hughes for their guidance in preparation for this award.

Research In Primary Care: A Dietician's Experience.

Sharon Madigan, Senior One Community Dietician, Community Nutrition and Dietetics Service, NWBHSST

The number of Allied Heath Professionals (AHPs) in Research is small and those AHPs in primary care research are even thinner on the ground. Therefore to find funding specifically for clinicians in primary care was fantastic.

I had previously made an unsuccessful attempt to have a research proposal funded by the R&D Office but after getting some feedback and seeing an advertisement for primary care applications I put together another proposal. I also approached the academics earlier and the proposal was further fine tuned prior to being submitted.

Unfortunately, this application was also unsuccessful. However, after positive feedback and some more changes I resubmitted 12 months later. I remember thinking as I was photocopying 25 copies of the large form and racing around to get the necessary signatures that I really was not going to do this again so it was now or never. I was finally invited to interview for a Primary Care Research Fellowship in Birmingham. This is a national award but funding is from the local R&D Office.

The application was made in conjunction with the Institute of Post Graduate Medicine and Primary Care and prior to my interview the then Director, Professor Domhnall McAuley arranged a practice interview. This can only be described as a horrendous experience but this was the intended effect. The real one would not be as bad! It was a real wake up call and much work was needed prior to the actual interview.

The interview was formal and included a 10 minute presentation to a panel of thirteen professionals and a

patient representative. I was successful and in 2001 I was awarded a three year Fellowship. I started my PhD in 2002 with the aim being to complete an educational intervention with primary health care professionals. The project combines both quantitative research techniques, which I had experienced before and also qualitative research techniques, which were new to me. I have built up a range of new skills and have been able to avail of training in a number of research areas. Presently I am nearing the end of my data collection and I am writing as I go along. One of the most important pieces of advice I got at the beginning was to always keep writing. At the time I didn't see the point but those small pieces of work have now been added together to form chapters.

The National Primary Care Group also brings all award holders together once a year for a conference. This gives holders the chance to meet with other researchers and I found it useful to measure my progress with other researchers at a similar stage. The conference allows you to present your work and also gives the opportunity to go to workshops on various topics (leadership, writing etc.), which have been suggested by the award holders.

What next is the issue for me? My clinical role, which I enjoy, awaits me after I finish my award but do I want to leave research again? Well no, that's why I came back in the first place. However, the pressures of my primary care workload currently do not facilitate protected time for research. If I could have my cake and eat it, to do a little of both, it would be great.

General Practice Research Registrar scheme

Dr Gerry Gormley GP Principal, Rowan Tree Practice, Dunluce Health Centre, Belfast.

After completing the hospital component of my General Practice vocational training scheme at the Mater hospital in 1999, I was appointed as one of the first GP Research Registrars in Northern Ireland. This new scheme, jointly funded by the R&D Office and the Northern Ireland Council for Postgraduate Medical & Dental Training Agency (NICPMDE) now the Northern Ireland Medical & Dental Training Agency (NIMDTA)) appealed from the first moment I saw the ad in the local press. The two-year appointment comprised of two main aims. Firstly to gain training in General Practice and achieve the certificate of prescribed experience in vocational training for General Medical Practice (JCPTGP) and the MRCGP. The second aim of the scheme was to receive training in the principles of research, with a particular emphasis on research in primary care.

I was based in the Deptment of General Practice at QUB and guided by my trainer (and supervisor) Dr Keith Steele (Senior Lecturer in General Practice). These were exciting times as we embarked into new territory in this new post. We constructed a timetable to balance the components of GP training and research training. I am glad to say that our initial blueprint of regular journal clubs, research methods seminars and GP clinical tutorials still thrive to this day! Particularly useful were several RCGP research master classes that were hosted by the Dept of General Practice, QUB.

During this scheme I was encouraged to develop a research project and enrol in a postgraduate degree. Little did I know that after enrolling for a Doctorate in Medicine where this would take me! My research project entitled 'Musculoskeletal disease: Innovations at the primary/secondary care interface' gave me the opportunity to put my research training to good use! From literature reviews, developing various qualitative and quantitative study designs, applying for grants, project managing multidisciplinary research, statistical analysis and dissemination of study findings. Through



Dr Gerry Gormley and other members of the multidisciplinary Belfast Early Arthritis Research Team



Dr Gerry Gormley & Dr Keith Steele Winter graduation QUB 2004 where Dr Gormley was awarded a Doctorate in Medicine.

my research I got the privilege to present my work both nationally and internationally and published several papers in recognised journals. What's more I have had the opportunity to see tangible changes in health care practice as a result of my work. To top off my experience I was delighted to be awarded the Dr JD Williamsom prize for postgraduate research at QUB – I gather the first GP in its 60 year history.

What's next? A long rest? No chance - I have now embarked on further postdoctoral research on prostate cancer screening in primary care. Also following my scheme I was appointed as a GP principal in Belfast.

In summary the GP research registrar post has given me an excellent start in academic General Practice. The Department of General Practice at QUB provides an excellent and structured environment for any GP registrar to gain training in the principles of research.

Did I feel the scheme worthwhile? Absolutely – it has opened many doors for me. 90% of health care is provided for in primary care – so no better place for clinical research!

Would I do it again? Yes without a doubt.

Would I recommend it to any prospective GP registrar? If you are interested in primary care research - look no further than this scheme! Equally the scheme has given me a sound foundation in my career as a General Practitioner – essential for any GP considering a career in academic General Practice.

The Medical Research Council General Practice Research Framework

Dr Irwin Nazareth, Director of the Medical Research Council General Practice Framework (MRC GPRF)

The MRC GPRF is a co-ordinated network of practices involved in clinical trials, epidemiology, and health services research. It was set up in 1973 for the MRC mild hypertension trial. This and a subsequent trial on the treatment of hypertension in the elderly demonstrated that high guality large scale research could be conducted in general practice. In 1980 the MRC suggested that the GPRF be developed as a national resource and this was formally approved in 1986. In the early 1990s the GPRF was expanded so that several large studies could be conducted at the same time and to enable the selection of representative samples of UK general practice. There are currently 1060 member practices across the UK of which 67 are in Northern Ireland. Within the practices a research nurse, usually the practice nurse, is responsible for managing the studies on a daily basis. There are currently 18 externally funded projects running within the GPRF. These studies are initiated by primary and secondary care researchers and cover a range of topics that are specific to primary care



medicine but also include research in secondary care medicine that requires a primary care sampling frame. The GPRF co-ordinating centre assists researchers at all stages of the research process. This includes the development and costing of the research protocol, training of research nurses on data collection methods, the running of the study in primary care (i.e. recruitment, randomisation, administration of the study instruments, delivery of treatments if relevant, follow up of study participants and other such research related activities), the management of quality control of the research process at each stage of the study and the final data management and analyses.

The MRC has recently appointed Professor Irwin Nazareth as the Director of GPRF to take forward the strategic development of the GPRF as a national resource and to develop appropriate engagement and linkages with regional networks of general practices. In order to achieve this a series of regional meetings are planned across the country to provide local researchers with information on the research potential of the MRC GPRF and to allow the MRC GPRF co-ordinating centre to develop an understanding of the research needs of the local community and how the MRC GPRF might work towards addressing these needs. The long-term plan will be to integrate the research activities of the MRC GPRF with the recently established UK Clinical Research Network (CRN). The UK CRN aims to work towards improving national health and enriching world knowledge by harnessing the clinical research potential of the NHS through the development of world-class infrastructure to support clinical research of welldesigned studies in clinical practice.

The MRC GPRF was delighted to have had the opportunity to hold its first regional meeting in Belfast on the 15th March 2005. This meeting was well attended by representatives from the Northern Ireland R&D Office, primary care academic medicine and general practitioners and nurses from MRC GPRF member practices. The meeting explored the potential of future research collaborations between some of the primary and secondary care research active groups in Northern Ireland and the MRC GPRF. MRC GPRF practices in Northern Ireland are currently participating in four major studies. These are:

- TOIB a randomised controlled and patient preference trial investigating the effectiveness of topical versus oral Ibuprofen for the treatment of chronic knee pain in older people.
- GNOME A double-blind randomised placebocontrolled trial of topical nasal steroids in 4-11 year old children with persistent bilateral otitis media with effusion (OME) in primary care
- DVT A case controlled study designed to quantify the risk of venous thrombo-embolism associated with air travel.

 PREDICT – A cohort study to develop and validate an innovative, multi-factor European risk score for use by general practitioners to predict the onset and maintenance of depression.

The GPRF values the contribution that NI practices have made to the success of the network to date and are keen to further develop collaborations with practices and the academic community in Northern Ireland. Further information on working with the GPRF can be found on the website http://www.mrc-gprf.ac.uk/ or by contacting j.gordon@gprf.mrc.ac.uk who will offer guidance on the operational procedures and the most appropriate academic contact within the organisation.

Intellectual Property, Innovation, and the HPSS.

Dr David Brownlee, Innovation Advisor, Clinical Research Support Centre.

The Clinical Research Support Centre (CRSC) was established by the R&D Office in 2002 with a remit to provide advice and practical support in the conduct of clinical research within the Health and Personal Social Services (HPSS). A previous article in R&D Today outlined the service and role of the CRSC*. The team has recently expanded to include an Innovation Advisor. This article introduces this important role for the HPSS community.

What is Innovation? Innovation is the successful exploitation of new ideas, which will help to secure real improvements in care practices throughout the HPSS. Innovation occurs naturally within the HPSS through the work of its employees. Innovation can take a number of forms, for example: a novel therapy, a novel diagnostic procedure, a new or improved device, a new drug or its new use, data, software, training material, a treatment protocol, or a new management system. The incorporation of such new ideas, technologies, design or best practice is a key process that enables the HPSS to deliver high quality, effective services.

What is Intellectual Property? Intellectual Property (IP) is the creative and innovative ideas that are assets in

the same way that physical property is a tangible asset. Intellectual Property Rights (IPR) are the rights obtained to use and protect the intellectual property.

For example, if you have an idea for a new or improved device, what should you do? If a prototype



for the device is to be made, it should first be protected, preferably through a patent or registered design right. A commercial manufacturer is unlikely to make your device in future, however good it is, unless the IP is protected. They will need to know that the improvement has not been publicly disclosed, and that the prototype or the design organisation has been working under conditions of confidentiality. The basis of IP protection in this example applies to other innovations as well. To develop innovations, IP must be available, unpublished and protected.

A local example of realising innovation, which you may be familiar with, is that of the world's first mobile defibrillator. In 1965, at the Royal Victoria Hospital, Belfast, a team led by Professor Frank Pantridge, converted a mains defibrillator to operate from two car batteries in the back of an old ambulance - it weighed 70 kilos. This invention was the forerunner of what was to become the portable defibrillator, which has saved the lives of countless cardiac patients over the past 40 years. The technology had significant IP associated with it and was protected by a family of worldwide patents. This IP protection contributed significantly to its successful exploitation.

The proper management of the IP associated with these ideas is a requisite for successful innovation. This view is emphasised in The Research Governance Framework for Health & Social Care, which includes finance and IP within its five domains. In line with wider government policy, the Framework requires the HPSS to identify, and where appropriate to protect, manage and develop IP emerging from its activities.

To address this important area an HPSS Innovation Policy/Framework is being developed. The purpose of this framework is to encourage a culture of innovation, and to ensure that the HPSS is able to capture innovations that can lead to new products and/or improved interventions and services for health & social care. The framework will also provide guidance on procedures to facilitate and implement the policy being developed. When complete, the agreed policy and procedures will be promoted throughout the HPSS community.

The main premise of the new policy is that HPSS innovations are identified and developed in the interests of patients and society as a whole. IP is the key that unlocks this innovation for the benefit of both current and future healthcare. An important part of this innovations initiative is to increase the awareness among clinical researchers, and indeed all HPSS employees, of the requirement to engage with the innovation process.

Any queries, help or advice you may have relating to IP and Innovation, please feel free to contact David Brownlee at the CRSC. Contact details are given below.

An introduction to David Brownlee, Innovations Advisor, CRSC

After obtaining primary and secondary degrees from Queen's University of Belfast, David moved into the technology transfer arena at the University of Southampton, where he was responsible for technology transfer and licensing in the Faculty of Medicine, Health and Life Sciences. He subsequently consolidated these skills at the University of Ulster, prior to taking up his current position of Innovation Advisor within the CRSC in January 2005. Within the academic technology transfer arena he has been involved in all aspects of the innovation process, as well as strategic management of IP portfolios. His new role within the CRSC includes the development of an Innovation Policy/Framework and associated guidance for the HPSS, in addition to acting in an advisory capacity for both HPSS trusts and employees for all issues relating to IP and Innovation.

David Brownlee PhD Innovation Advisor

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* "Clinical Research Support Centre" – An overview by Dr Karen Bailie, R&D Today, Issue 2, 2003

Editor's Note: As Intellectual Property and Innovation in the HPPS is an evolving area, we look forward to regular contributions from Dr David Brownlee.

HEALTH TECHNOLOGY DEVICES FUNDING PROGRAMME

Many thanks to all who attended the recent Health Technology Devices Workshop at the NI Science Park on Friday 6th May.

Led by the Department of Health, the Health Technology Devices (HTD) funding programme is intended to support collaborative R&D of innovative healthcare technologies towards the development of novel medical devices.

The HTD programme is currently open to outline applications.

The deadline for the current call is 5pm on Tuesday 24th May 2005. A further call is scheduled for Autumn 2005.

For more details, or to prepare and submit an application, please visit the Portal at http://www.healthtechnologyportal.org.uk. Potential applicants from Northern Ireland may contact Dr. Janice Bailie, Programme Manager for advice and assistance.

The remit of the HTD programme covers:

- All medical devices (including tissue engineering and trauma care devices);
- Other non-medical devices used in the NHS that interact with medical devices (e.g. operating theatre tables);
- Novel information technology development that enables a significant improvement in the performance of healthcare technologies;
- Healthcare devices for use in the community or patient home.

The programme excludes projects related to pharmaceuticals, medicines, and hospital information systems.

Project teams must contain at least one industrial partner and at least one research-based partner. It is also very important to include patient or healthcare-user representation in the project plan. Projects are limited to a maximum duration of 3 years.

Applications must demonstrate that the proposed technology is:

- innovative (projects should be subsequent to "proof of concept" research and prior to product launch activities, ideally ending with a technology that can be brought to market within 1-2 years);
- directly relevant to the NHS plan;
- addressing a recognised clinical need or social care need (including the involvement of a suitable clinician);
- commercially viable, with a clear route to market (showing that the partners recognise and can address all
 of the commercial and regulatory issues associated with exploiting the technology, including protection for
 Intellectual Property).

Dr Janice Bailie

Programme Manager, Allied Health Professions

Email: janice.bailie@rdo.n-i.nhs.uk

Janice Bailie graduated from Queen's University Belfast with a degree in Biochemistry in 1987 and subsequently completed a PhD in Biochemistry in 1990. Her PhD research focused on the synthesis and activity of peptide analogues of epidermal growth factor and transforming growth factor alpha on the growth of breast cancer cells and migration of endothelial cells. Her post-doctoral research continued to focus on gene expression in microvascular endothelium, firstly in the retina while employed as Sir Thomas Pocklington Research Fellow in the Department of Ophthalmology, Royal Victoria Hospital, Belfast, from 1990 until 1995, and latterly in the tumour microenvironment, while working as Research Officer in the Radiation Science Group, School of Biomedical Sciences,



University of Ulster. From 1998 until 2005, Janice was working as Divisional R & D Manager in Molecular Biology at Randox Laboratories Ltd., Crumlin, a manufacturer of in vitro diagnostics and instrumentation, where her work included the development of novel immunological reagents and DNA-based diagnostic tests. She joined the R & D Office as Programme Manager for Allied Health Professions in January 2005.

An evaluation Panel for the Doctoral Fellowships met early in 2005 and awarded a total of 9 awards, 3 in Health & Social Care Research and 6 in Clinical Science Research.

Doctoral Fellowships 2005: Clinical Science

Successful Applicants	Title
Mrs Susan Martin	Fit2Fly - Development of a new flight assessment system for respiratory disease.
Dr Kar Lau	A case control study of aetiological factors in achalasia
Dr Kathy McClean	Dietary antioxidants and pulmonary function in Northern Ireland
Dr Ciara McLaughlin	The effect of dietary intake of fruit and vegetables on vascular function in type 2 diabetes mellitus and normal pregnancy
Dr Julia Tolland	Ciprofloxacin-induced phototoxicity in patients with cystic fibrosis
Ms Joy Cuthbertson	Therapeutic Implications of the Effects of Oral Hypoglycaemic Therapy on the Enteroinsular Axis in Type 2 Diabetes.

Doctoral Fellowships 2005: Health & Social Care

Successful Applicants	Title
Lisa Jeffers	The experience and needs of women with hereditary breast and ovarian cancer (HBOC) over time following disclosure of a positive genetic test for BRCA1/BRCA2
Donna Brown	How can effective evidenced based pain management with older people following colorectal surgery be facilitated into practice?
Naomi Baldwin	Methicillin-resistant Staphylococcus aureus (MRSA) in nursing homes: can an improvement in infection control practices decrease MRSA Prevalence?

Cochrane Fellowships 2004

Under the 2004 Cochrane Fellowship Scheme a total of four applicants were successful

Successful Applicants	Review Title
Dr Marianne Dillon	Endovascular Repair for ruptured Abdominal Aortic Aneurysm
Ms Jennifer McGaughey	Outreach and Early Warning Systems for prevention of ICU admission and death in critically ill patients
Mrs Suzanne Martin	Smart Home Technologies applied to support Health and Social Care
Mrs Jacqueline Robinson	Therapeutic Touch for treating anxiety

Bursary Scheme 2004

A total of 23 Bursary awards were made in 2004. The following 6 applicants were successful during the time since the last R&D Today

Successful Applicants	Title
Mrs Katrina Hughes	Masters in Clinical Research
Miss Emma Crawford	MSc in Health Science
Miss Doreen Johnston	MSc in Health Science
Ms Sheila Magee	MSc in Health Science
Mrs Kathleen Deeney	MSc in Nursing
Ms Siobhan Mawhirk	Master of Clinical Research

MPhil Fellowships 2005

The 2005 MPhil Fellowship Evaluation Panel met early in 2005, and 2 Clinical Research awards were made

Candidate	Title/Topic
Dennis Molloy	Factors Affecting Blood Loss Following Total Knee Arthroplasty
Timothy Doyle	Isolation and Amplification of Human Marrow Osteogenic Subpopulations: Potential for the treatment of bone defect.

Cancer Prevention Fellowship Programme (CPFP)

The Ireland-Northern Ireland-NCI Cancer Consortium recognises that preventing cancer is one of the most important scientific and public health goals of the 21st century. In a bid to support this area of research, the R&D Office, Belfast and Health Research Board, Dublin participated in the NCI's distinguished CPFP. This programme is intended for individuals who intend to follow careers in cancer prevention upon completion. The R&D Office is pleased to announce that Lesley Anderson, who is currently employed in the Cancer Registry, Belfast, was successful in this round of the competition.

Health & Social Care Services Research Studentship 2005

This award assists the successful individual to develop a career in HSCSR by undertaking one year of general research training and by following a three-year programme leading to a PhD. The Evaluation Panel met in March and a total of two awards were made.

Supervisor & Co-Supervisor	Title
Professor Helen Dolk, Dr Ian Bradbury,	Risk of Congenital Anomaly among multiple births in Europe.
Dr Patrick McCrystal, Dr Rosemary Kilpatrick	A study of the influence of neighbourhood social and leisure facilities on drug taking and antisocial behaviours in adolescence.