

Your partner in innovation...



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Feedback

Do you have any comments on issues raised in this newsletter or would you like us to write about your idea? If so email us at enquiries@medipex.co.uk

Want to see good ideas from NHS staff that we are putting into practice? Visit: www.ennovations.co.uk

Medipex takes top honours at Innovation Awards

Medipex, the NHS Innovation Hub for the Yorkshire and Humber region, has been crowned 'Innovation Champion 08' in a prestigious awards ceremony at Leeds Town Hall, hosted by regional development agency Yorkshire Forward to showcase the very best of Yorkshire and Humber's innovative companies (continued on page 3).

Left to right: Tom Riordan, Chief Executive Yorkshire Forward; Nick Butler, Executive Director Connect Yorkshire; Richard Clark, Chief Executive Medipex; Ann Starkey, General Manager Medipex; Rt Hon Michael Portillo



Two more spin out companies for NHS

We are pleased to announce a joint collaboration involving the Universities of York and Hull and Hull & East Yorkshire NHS Trust has resulted in a new company, Imagel Ltd, that is set to improve quality assurance and safety in radiotherapy. Prof Andy Beavis from Hull & East Yorkshire NHS Trust has worked with colleagues from York and Hull (Dr Mark Godber, Prof John Goodby, Dr Andrew Wilson - University of York and Dr Gary

of radiotherapy that delivers precise radiation doses to carefully mapped out areas within the tumour.

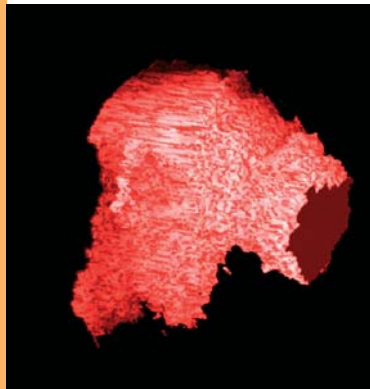
It is believed that successful applications such as those provided by Imagel Ltd could increase the use of IMRT in the UK and have a potentially positive impact on patient care. The impetus for the spin out company and its initial funding has been led by IP Group plc, the commercial exploitation partner of the University of York. The team have developed a novel gel dosimeter which promises a more reliable solution than previously experienced. Enhanced reliability is generally considered key to the use of this technology in pre-treatment planning of radiation therapy, as shown in the image on the left. This will check the performance of the equipment.

The second spin out, VERTual Ltd, also from Hull utilises a completely novel approach to training radiotherapy students. Cancer treatment is focussed at cancer centres involving significant capital investment in equipment (typically £2.5 million per treatment room). A national training crises has arisen, highlighted by the government last year, because access to clinical equipment by students has become severely restricted during normal working hours and this is now impacting on

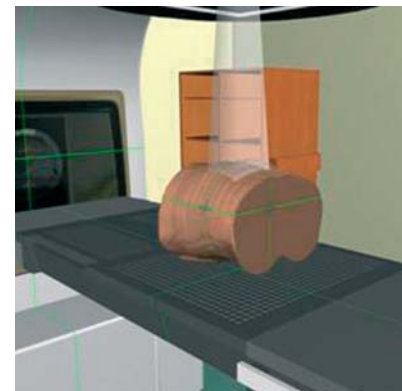
waiting times for patients being treated for cancer.

The solution is an interactive virtual training environment (VERT) developed jointly by Prof Roger Phillips, Dr James Ward (University of Hull) and Prof Andy Beavis (Hull & East Yorks NHS Trust) and was last years winner of the Medipex innovation competition.

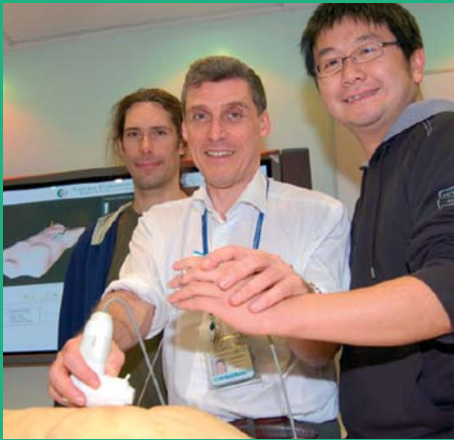
Their work has also received a high profile innovation award from the British Computer Society. Currently there is nothing similar to VERT commercially available and the partners have received significant interest world wide in the system since the training crises is also a worldwide problem. The National Cancer Director recently included a reference to the benefits of using the VERT system in his Cancer Reform Strategy and his NRAG report to ministers.



Liney - University of Hull) on the concept of a 3D dosimeter to assist the radiotherapists in the calculation of the appropriate dose for intensity modulated radiotherapy (IMRT). Currently, quality control checks of the intensity pattern to be used for the treatment of a cancerous tumour by IMRT rely on 2D technology (such as film) and is time consuming to perform. IMRT is a relatively new method



SUCCESS FOR LEEDS TRAINING SIMULATOR AT NATIONAL INNOVATION AWARDS



Dr David Kessel, centre, with Derek Magee and Alan Zhu, University of Leeds, and the simulator

After winning its category in the 2007 Medipex NHS Innovation Competition, an 'Augmented Reality' training simulator for Interventional Radiology developed in Leeds has come second in its category at the NHS National Technology Awards in London.

The simulator uses virtual reality technology to train people in the skill of ultrasound-guided needle insertion. "Putting a needle in under image guidance is a fundamental first step in a huge range of procedures," said Dr. David Kessel, Vascular Radiologist from Leeds Teaching Hospital who has led the development of the simulator in conjunction with Dr Derek Magee of the University of Leeds Department of Computing.

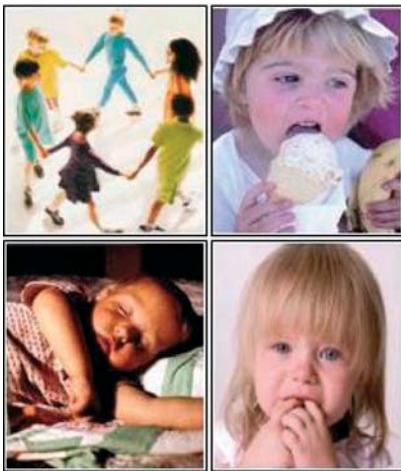
Needles are used in everything from draining blocked kidneys to treating tumours. "But none of those things can work unless you've got the core skill of putting the needle in the right place." Dr Kessel said. "The simulator comprises actual physical elements which interact with computer generated 'virtual' images of the internal organs and blood vessels. The operator sees a mannequin and holds a realistic ultrasound probe and needle. As the probe is moved over the mannequin the trainee sees an appropriately oriented computer generated image. The needle is aimed towards a virtual target and inserted into the mannequin. The computer then

generates a virtual image of the needle as it would be seen on ultrasound as in the real life procedure."

David Kessel was presented with the award by renowned scientist Professor Heinz Woolf. Of the award, David said, "I am delighted for the team; it is nice to have some recognition for the large amount of work and a lot of effort that has gone into this project from people."



Professor Heinz Woolf presenting the award to David Kessel



Bye-bye to parenting woes

Whether you're a Health Visitor or parent looking for help and advice on toddler tantrums, toilet training or getting a child to sleep, this educational resource is here to help. The Parenting Issues Compilation DVD has been put together by the Community Child and Family Mental Health Service at Rotherham PCT to provide practical advice and effective parenting techniques for parents bringing up a young family. The DVD aims to help parents better understand their child's behaviour and shows how implementing positive parenting skills can improve behaviour and build better family relationships.

The DVD is delivered as a series of seven short programmes, covering common childhood problems. Each programme follows a family where simple parenting skills such as reflective listening and positive discipline are introduced and explained step by step. Each programme clearly summarises important skills that parents can put into practice. The seven programmes are: Encouraging Good Behaviour; Meal Time Problems; Sleeping Problems; Toilet Training; Reducing Holiday Stress; Separation and Divorce, and Post-natal Depression. To place an order for the DVD please visit the website www.ennovations.co.uk

Service redesign training course available

A new training course is now available via www.ennovations.co.uk to train NHS staff in the use of the Functional Framework for Competencies (FFC) model which has been developed and implemented across the rehabilitation directorate at Calderdale and Huddersfield NHS Foundation Trust. The FFC model is a risk management and quality assurance framework which provides a clear and systematic method for analysing services and managing the delegation of specific tasks to support staff with skill mix review being an inherent part of the process. Once implemented it leads to the identification and development of task related competencies which provide a comprehensive and robust training package for the support worker and ensures patients receive consistent, evidence based interventions. The introduction of FFC in the rehabilitation directorate has resulted in reductions in the directorate risk rating, patient wait times and cost per patient contact and an increase in the number of patients seen. The FFC model is transferable into any hospital setting and has quality assurance at its centre.

"The ability to delegate tasks safely to assistants is key to the delivery of an efficient and high-quality service to patients," said Jayne Duffy, Community Rehabilitation Manager and one of the developers of the FFC model. "Although Skills for Health provide competencies they are very broad," added Rachael Smith, also a Community Rehabilitation Manager who has co-developed the model with Jayne. "This tool allows practitioners and workforce planning staff to identify the individual competencies which underpin the Skills for Health competencies and which assistants need to be trained in so as to be able to carry out their jobs safely."

The first three training courses will be held in Halifax on 24th July, 17th September and 27th November with 20 places available at each. For more information, pricing and booking, please visit www.ennovations.co.uk or contact enquiries@medipex.co.uk

Medipex invest in their staff



Ann Starkey joined the part-time Executive MBA Course at Leeds University Business School in October 2004 and graduated with distinction in July 2007. Her MBA dissertation was on the effects of e-business on the success of small companies.



Stephanie Bridgford also graduated from the Leeds University Business School obtaining a distinction for her MA. Her dissertation entitled 'Knowledge & Operational Management: From the NHS to the Intellectual Property Hub' focused on three areas: how knowledge is transferred from the NHS; the innovation process and the life of an innovation (case study).

Two new members of staff



Kate Carlisle - Kate joined Medipex in January 2008 as the Business Development/Market Research Analyst. She recently completed her PhD studies in molecular immunology at the University of East Anglia. Her research involved investigating the interactions between probiotic bacteria and the host immune system, which involved carrying out collaborative work at the University of Milan, Italy and TNO, in the Netherlands.

During her PhD, Kate attended a BBSRC technology transfer workshop and participated in the Biotechnology Yes competition that gave her a good understanding and knowledge of technology transfer.

Kate holds a BSc (Hons) degree in Biology from the University of Manchester. As part of this degree she

completed a twelve month industrial placement at Syngenta Seeds, Cambridge working as a member of the double-haploid laboratory and carried out research into improving double-haploid technology.



Liz Maddaford - Liz joined Medipex in February 2008 to be responsible for the data collection and development of the Clinical Expertise Mapping Exercise. Liz was previously employed by the University of Leeds as Research Project Manager within the Faculty of Medicine and Health.

As part of her role within the University, Liz was responsible for the co-ordination and delivery of the Research Assessment Exercise for the Faculty. Liz holds a BA degree in Business Information Technology from the University of Huddersfield.

Medipex takes top honours at Innovation Awards (cont)

The Innovator/08 Awards were hosted by the Rt Hon Michael Portillo, who presented Medipex with the award for 'Innovation Champion', pointing to Medipex's achievements in identifying six hundred ideas for healthcare related innovations. To date Medipex has played a direct role in bringing 27 new products to market and the creation of five new businesses.

Jim Farmery, Head of Innovation at Yorkshire Forward said: "The winners of the Innovator/08 are those people and companies who have taken a different approach to business and incorporated new ideas and new ways of working, showing others how it can be done by raising awareness of the benefits of innovation."

Richard Clark, Chief Executive of Medipex said: "This award recognises the hard work and efforts of all our staff, as well as that of NHS organisations from around the region. Winning a truly cross sector award like this shows that the Healthcare sector within Yorkshire and Humber is at the forefront of innovation and development."

Ever wondered how NHS Procurement works...?

In January 2008 Medipex Business Development Manager Chris Herbert commenced work on a 12 month study into how NHS Procurement works, the roles of each of the organisations involved and to discover what the critical success factors for a product to get into the NHS are. Throughout the project, Chris will be engaging with suppliers into the NHS to find out what problems suppliers have in selling into the NHS and also with the various organisations who negotiate with companies on behalf of the NHS including Trust supplies departments, the Yorkshire and Humber Commercial Procurement Collaborative (YHCCPC) and NHS Supply Chain. Of the project Chris said: "This project is a real challenge as the current NHS procurement landscape seems so complicated, but one which I hope will yield real benefits to both suppliers to the NHS and also to those working in procurement for the NHS."

If you are involved in procurement for the NHS, are a supplier selling into the NHS who would like to contribute to the work or someone who would just like to find out more, please contact Chris on chris.herbert@medipex.co.uk or on 07960 583213.

What is Medipex?

Medipex is the NHS Innovation Hub for the Yorkshire and Humber region. It is one of a national network of NHS Innovation Hubs that manage and exploit Intellectual Property (IP) within the NHS.

IP is any new idea or invention. Such ideas can arise out of routine work as well as research and may result in a product which is commercially valuable.

Example ideas are:

- **Medical Devices and Equipment**
e.g. Motorised Drip Stand used in operating theatres to lift heavy irrigation bags.
- **Diagnostics and Pharmaceutical**
e.g. Novel solution for storing transplant organs; a cancer diagnostic technique to aid cancer detection.
- **Medical Software**
e.g. Software tool to assess motor skills and IT capabilities of users of electronic assistive technology.
- **Training Materials**
e.g. Toolkit to distinguish between service evaluation, research and clinical audit.
- **Radiotherapy**
e.g. Software procedure to assess digital image manipulation, radiographic callipers to accurately size prosthetics from X-ray images.

What can Medipex provide?

- Confidential advice and guidance
- Identification, assessment and exploitation of invention/ideas
- Expert advice e.g. legal, financial, commercial, sources of funding
- Provision of proof-of-concept funding: buying out time, market intelligence
- Commissioning of prototypes and clinical trials
- Identification of commercial partners and collaborators
- Project management and ongoing support
- Brokering of collaborative R&D (industry and NHS)
- Supporting commercially sponsored research and trials
- Innovative Services: business plans, spin out companies, joint ventures

What next?

All the above services are free to you providing that you work for a NHS Trust based in Yorkshire and Humber and your Trust is a member of Medipex. If you are unsure whether your Trust is a member, please contact Medipex on the number below. Any enquiry whether your Trust is a member or not will be treated in strict confidence and if we can, we will give guidance over the phone.



Mobile X-ray cassette/detector holder



Sheffield Teaching Hospitals Foundation Trust's continuing drive for innovation is further highlighted with the advent of a mobile X-ray detector/cassette holder. The stand (pictured) is designed to increase the ease and efficiency of taking X-ray images, allowing radiologists to acquire lateral, sagittal and oblique views. In the clinical setting the X-ray stand is used in cases of serious injuries and in emergency rooms and intensive care units where a patient's physical mobility may be hindered. For example, patients who have had fractures are often unable to rotate a broken limb to acquire a perpendicular view. Furthermore the easy-to-use holder overcomes the difficulty of having to manually hold a detector/cassette which can result in motion artefacts in the acquired image.

The telescopic stand holds both detectors and cassettes accommodating sizes of up to 47 cm x 49 cm including grids. Vertical positioning of the holder is secured via a positive acting screw lock. The unit stands on a sturdy five leg base for high stability whilst hard wearing swivel casters facilitate easy steering and complete mobility. The stand is made of stainless steel tubing with a durable, easy-to-clean surface for easy maintenance.

The holder is currently being trialled by radiology departments at various NHS Trusts. If you are interested in a free three month evaluation of the mobile X-ray holder (subject to availability), please contact Medipex.

£675,000 for research projects involving NHS Trusts

In the last quarter of 2007, the White Rose Health Innovation Partnership (WRHIP) awarded funding totalling £675,000 to projects involving NHS staff in the Yorkshire and Humber region. The WRHIP programme has espoused the concept of 'Open Innovation' in healthcare research and development projects and all the funded projects bring together academic and clinical expertise to accelerate their development, all of which are based on a defined clinical need. Some of the projects were created directly as a result of a series of 'Open Innovation Workshops' held in the summer to which NHS staff contributed greatly. Funded projects include a range of training materials, QA software for ultrasonographers carrying out Nuchal Translucency testing, a device to aid rehabilitation from orthopaedic surgery and an advanced wound care product.

More information about the White Rose Health Innovation Partnership programme and the funded projects can be found at www.wrhip.org

Commercial Opportunities

Innovation	Description	Commercial Opportunity
ICSS Medical Records	A software system that can be customised for the secure storage of clinical information in any hospital unit.	Medipex are currently looking for partners to commercialise this advanced software system.
Improved Walking Crutch	An innovative modification to the walking crutch that optimises upper body movement to assist mobility.	We are seeking a partner for manufacturing/distributing of this product.
GAS	A non-invasive technique for the measurement of gastric acid secretion.	We are seeking a partner for manufacturing/distributing of this product.
Radiology Training Simulator	A reality simulator for training of Ultrasound guided needle insertion procedures.	The simulator is currently being evaluated and Medipex is seeking enquiries from commercial partners.
Parenting Booklets	A series of booklets providing parenting techniques and advice for parents bringing up a young family.	We are looking for a publisher to take these booklets to market.

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