Karolinska University Hospital acquires Leksell Gamma Knife Perfexion

Karolinska University Hospital recently acquired Elekta's fifth generation radiosurgery system, Leksell Gamma Knife® Perfexion™. Since January, Karolinska clinicians have been using the system to treat more patients per day and tumours that used to be hard to reach. Physicians also are much more easily treating multiple metastases in a single session.

While Karolinska clinicians are currently treating traditional Gamma Knife indications (metastases, meningiomas, arteriovenous malformations, dural fistulas, acoustic neuromas), the immediate impact Perfexion has made is the ease with which physicians can treat two or more metastases in one session.

"We treat five to ten metastases on a regular basis, because the automated collimator makes it possible to rapidly plan and treat multiple tumour isocenters," Karolinska neurosurgeon Dr Ernest Dodoo explains. "Suddenly, it is feasible to treat everything we see. Now, the question is not 'Is it technically possible?' but rather 'Does it make sense clinically from a therapy standpoint?'"

For more information see www.Elekta.com or E. michelle.lee@elekta.com

Oxford Biosystems half price evaluation kit

Oxford Biosystems supplies a range of Neurological Biomarkers, including: Annexin V, Glial fibrillary acidic protein (GFAP), Neuron Specific Enolase (NSE), S100bb, C-reactive protein (CRP), sRAGE, Heart type fatty acid binding protein (h-FABP), High-Mobility Group Box 1, sTNFR-I, Phosphorylated Neurofilament H (pNF-H), Gold Dot NR2 Antibody, Amyloids, Catecholamines/Neurotransmitters, CVDefine✍ (anti-PC IgM), Glutamate, Glutamine, Tryptophane, Kryptopyrrole, Glycin, γ Aminobutyric Acid (GABA), Phenylalanin/Tryptophan ratio.

These markers are provided as Enzyme Linked Absorbant Assays (ELISA) for laboratory use only. A half price kit is supplied for the initial evaluations with discounts available for future volume purchases.

Please contact John Coombes on jcoombes@oxfordbiosystems.com for price and availability.

Warfarin Comparison Study to enrol 90% of atrial fibrillation patients with high risk of stroke

New data from a warfarin comparison study shows that the health characteristics of the patients enrolled on the ROCKET AF trial (Rivaroxaban Once daily oral direct Factor Xa inhibition Compared with vitamin K antagonism for prevention of stroke and Embolism Trial in Atrial Fibrillation) more closely reflect the typical AF patient population than four other recent major trials.

The baseline demographic data, from Bayer Schering Pharma's study, were presented at the 19th European Stroke Conference, Barcelona; the study is designed to assess the safety and efficacy of once-daily oral rivaroxaban (Xarelto®) against warfarin in 14,269 AF patients.

Healthcare professionals widely use the CHADS tool to assess stroke-risk and subsequent need for anticoagulation therapy in patients with AF. A high CHADS score (three and above) corresponds to a greater risk of stroke. The ROCKET AF study specifically targeted AF patients with the greatest need for a stroke-preventing anticoagulant. Of those enrolled, 90% have a CHADS score of three or higher.

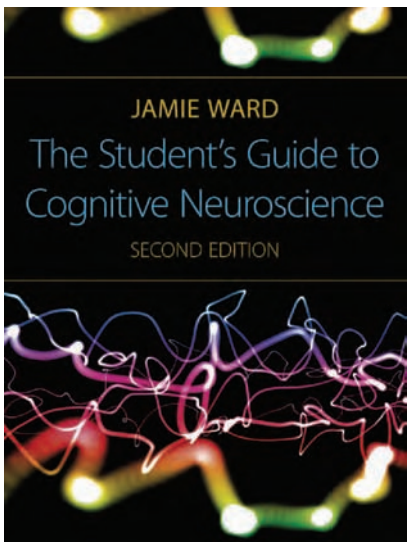
"ROCKET AF is a study with a patient population that reflects clinical practice advocated in current guidelines," said Dr Luis Felipe Graterol, Medical Director, Bayer Schering Pharma. "We are looking forward to the results of the study and hope that this trial provides us with much needed information on how to effectively reduce the risk of stroke for patients with atrial fibrillation."

The abstract is available online at www.eurostroke.eu/pub_ongoings.asp

The Student's Guide to Cognitive Neuroscience, 2nd Edition

This title, by Jamie Ward, was published by Psychology Press in January 2010. Reflecting recent changes in the way cognition and the brain are studied, this thoroughly updated edition of the best-selling textbook provides a comprehensive and student-friendly guide to cognitive neuroscience. Jamie Ward provides an easy-to-follow introduction to neural structure and function, as well as all the key methods and procedures of cognitive neuroscience, with a view to helping students understand how they can be used to shed light on the neural basis of cognition.

Robert H Logie, Professor of Human Cognitive Neuroscience, University of Edinburgh, UK, says ""I thought the first edition was the best textbook I have come across on cognitive neuroscience. This second edition is even better."



A complimentary examination copy is available. For more information see www.psypress.com/ward

New data supporting Cladribine Tablets

New data providing further understanding on Cladribine Tablets as a potential new therapeutic option for relapsing forms of multiple sclerosis (MS) were presented at the 62nd Annual Meeting of the American Academy of Neurology (AAN).

Cladribine Tablets, Merck Serono's proprietary investigational oral formulation of cladribine, is currently under regulatory review in a number of countries.

"The relevance of the CLARITY study is further substantiated by the series of additional analyses presented at the AAN", said Bernhard Kirschbaum, Merck Serono's Head of Global Research and Development. "We are committed to continuing to work with regulatory authorities to bring Cladribine Tablets to patients at the earliest point in time." The data presented at the AAN are from pre-specified and post-hoc analyses of the Phase III CLARITY clinical trial.

For more information see www.merckserono.com

SonoSite point-of-care ultrasound systems hit the spot

SonoSite point-of-care ultrasound systems, including an M-Turbo® and three S-Nerve® instruments, are changing the approach of anaesthetists in regional anaesthesia at the Nottingham University Hospitals NHS Trust. Dr Nigel Bedforth, Consultant Anaesthetist at the QMC campus of the hospital, explained, "Both the M-Turbo and S-Nerve systems have great image resolution, offering excellent visibility of nerve structures. As a result, anaesthetists who are using point-of-care ultrasound are developing better awareness of internal anatomy; we're realising that a more thorough understanding of muscles, tendons, vessels, bones and other structures is really important for being skilful at finding nerves, rather than relying solely on landmarks. Our SonoSite systems allow us to place nerve blocks more safely and accurately, even, for example, for the more difficult blocks like supraclavicular, which were often previously avoided due to the risk of pneumothorax."

Dr Bedforth added, "I use the M-Turbo for virtually everything I do, while the S-Nerve systems suit less frequent users because they are even easier to use, with a minimum of buttons and controls. We are keen to pass on our techniques to other anaesthetists and, as part of our relationship with SonoSite, we have jointly run ultrasound-guided anaesthesia courses for a number of years."

For more information T. +44 (0)1462 444 800, E. ukresponse@sonosite.com, www.sonosite.com

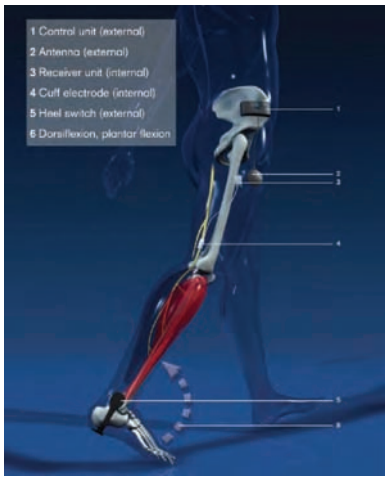
Implanted neural prosthesis signals liberation for stroke sufferers

An implantable drop foot stimulator that compensates for the lack of control of the ankle joint and aids stroke patients suffering from drop foot has been launched in the UK by Otto Bock Healthcare. The 'ActiGait®' system restores a steadier and more natural walking pattern to the wearer, meaning users can focus on their outer environment and return to more normal daily activities.

Drop foot is the inability to raise the foot due to a weakness in or paralysis of the dorsiflexor muscles. This condition is a frequent result of damage to the central nervous system following a stroke. ActiGait® is implanted beneath the skin of the thigh with the control unit worn comfortably on a belt and is easy to use, even for patients with impaired arm functionality. The system is wireless with implanted electrodes.

Patient studies in Denmark illustrated an increase in distance patients could walk in a four minute period and in walking speed over 20 metres, without the help of another person. Furthermore, qualitative responses highlighted improvement in confidence with less fear of falling, promoting the long-term potential to provide a positive effect on personal well-being, safety and performance.

For more information contact Gaynor Norris, E: gaynor.norris@ottobock.com



Simple solution for long term live cell imaging

Adding to Nikon's series of BioStation incubator imaging systems, which offer excellent cell care throughout imaging, the new BioStation IM-Q allows users with minimal microscopy experience to conduct live cell imaging without a steep learning curve. This compact system incorporates a microscope, an incubator and a high sensitivity, cooled quantitative CCD camera integrated into a single package. Providing a stable environment for live cells and advanced phase and fluorescence imaging solutions for simple, long term, cell friendly timelapse data acquisition, the BioStation IM-Q eliminates the need for a darkroom, meaning it can be installed anywhere.

The BioStation IM-Q provides fully motorised control from a PC, allowing users who are not accustomed to operating a microscope or camera to easily conduct timelapse imaging.

Integrating cell culture and image capture functions, no complex setup or alignment procedures, that conventional timelapse observation systems require, are necessary. Providing thermal and mechanical stability, BioStation IM-Q greatly reduces focus drift, enabling reliable imaging even over long periods.

Two high performance monochrome Nikon Digital Sight camera options are available, and two kinds of analysis software.

For further information E. info@nikoninstruments.eu, or see www.nikoninstruments.eu/Products/Cell-Incubator-Observation/BioStation-IM-Q

To feature your news in ACNR, please contact Rachael Hansford, T. 01747 860168, E. rachael@acnr.co.uk

S-Nerve offers greater insight for Paediatrics

With intuitive controls and a wide range of transducers, SonoSite's S-Nerve™ point-of-care system offers anaesthetists easy access to ultrasound guidance for line placement and regional nerve blocks. The paediatric anaesthetics department at Leeds General Infirmary has taken advantage of this user-friendly instrument to ensure accurate and safe regional anaesthesia, as well as post-surgery multimodal analgesia. Consultant Paediatric Anaesthetist Dr Duncan Johnson explained, "Ultrasound guidance is of particular benefit to paediatric specialities, as the anatomy of a premature infant has little in common with that of a 17 year old. Use of ultrasound to guide nerve blocks offers an easy route to safer, more reliable blocks, enabling the anaesthetist to visualise the needle adjacent to the nerve, while avoiding other important structures."

"Leeds is a national referral centre for hand surgery, specialising in transplants and improving motor function for children with congenital abnormalities. These procedures are generally performed in very young children, and effective nerve blocks can be difficult to achieve. Ultrasound guidance is very helpful, and the small footprint of the S-Nerve's hockey stick probe is very well suited to this application. The anaesthesia-focused controls of the instrument make it very quick and easy to operate during procedures, obtaining good quality images with a minimum of adjustments."

For more information T. +44 (0)1462 444 800, E. ukresponse@sonosite.com or see www.sonosite.com

Elekta acquires Resonant Medical Inc.

Elekta recently announced the acquisition of Resonant Medical Inc., Montreal Canada. Through this acquisition, Elekta adds exciting new solutions for image guidance as well as highly skilled R&D resources in the field of oncology imaging and motion management.

Resonant Medical Inc. ('RMI') develops systems for image guided radiation therapy of soft tissues using latest generation, 3-D ultrasound technology. RMI's integrated software solutions have been developed in cooperation with leading academic institutions to improve treatment accuracy for cancer in the prostate, breast, liver, cervix, uterus, bladder as well as head and neck. RMI's equipment is in daily clinical use in the US, Canada, Italy, The Netherlands and Ireland and its research collaborators are considered among the world leaders in their field.

Elekta's President and CEO Tomas Puusepp said, "This further enhances Elekta's state-of-the-art solutions in IGRT, by adding RMI's leadership in soft tissue visualisation and tracking. In addition, given Elekta's dedication to open architecture, the technology will be made available to customers with other vendors' equipment, making it possible to improve IGRT processes everywhere."

RMI will provide useful additions to Elekta's MOSAIQ® treatment planning solutions by displaying soft tissue structures, not easily seen on X-ray computed tomography but in exact spatial correlation with these CT images, and offering a suite of automatic segmentation and contouring tools.

For further information, E. todd.powell@elekta.com

MEG System for monitoring the brain in action

Elekta has unveiled its next generation magnetoencephalography (MEG) system, Elekta Neuromag® TRIUX*. A platform that addresses key requirements critical for monitoring normal and abnormal brain activity, Elekta Neuromag TRIUX was designed to operate in virtually any clinical environment.

Implementing a MEG program will be more practical for most clinical environments with the Elekta Neuromag TRIUX system's dynamic range, which has been increased three-fold, in addition to built-in active shielding, which protects its ultrasensitive sensor array from magnetic interference. These improvements make Elekta Neuromag TRIUX suitable for siting in even the busiest hospitals and research centres.

Elekta Neuromag TRIUX also provides several features designed to simplify day-to-day use of the system and enhance patient experience. These include a new connector panel—with easy to access connectors—and an all-new gantry that allows clinicians and researchers to conduct MEG measurements with the patient in a more comfortable upright position.

Elekta Neuromag TRIUX will be available as a turn-key system or as a hardware / software upgrade for certain Elekta Neuromag models. To learn more, visit www.elekta.com/MEG.

Nikon Instruments opens Microscopy Centre in Budapest

Nikon Instruments has partnered with the Institute of Experimental Medicine of the Hungarian Academy of Science KOKI in Budapest, Hungary to open the first Nikon Microscopy Centre (NMC) in Central Europe. The centre will allow neuroscience researchers access to state-of-the-art microscopy and imaging systems provided by Nikon. Systems include the Eclipse Ti-E with TIRF and the new super-resolution N-STORM and the Eclipse FN1 with C1plus, ideal for live cell and deep tissue imaging.

"The centre will make an important contribution to the development of neuroscience imaging techniques and further our research immensely, enabling us to maintain our position in the international mainstream of neuroscience research. We were pleased to partner with Nikon, who have collaborated with other leading organisations to launch several similar centres in the past," commented Professor Tamas Freund, Director of the Institute.

The Institute of Experimental Medicine is the only research institute in Hungary dedicated exclusively to medical research. Its activity focuses on basic biomedical research, primarily in the field of neuroscience, including studies on neurotransmission, learning and memory, behaviour, ischaemic and epileptic brain damage, as well as the central and peripheral control of hormone secretion.

For further information contact Nikon Instruments Europe, T. +44 (0)208 247 1718, E. info@nikoninstruments.eu

L-R: Marjan Vasic, Nikon GmbH Austria, Harald Bayer, Nikon GmbH Austria, Peter Drent, Nikon Instruments Europe, Mr Eimori, President, Nikon Instruments Europe at the opening of the NMC at IEM, Budapest.