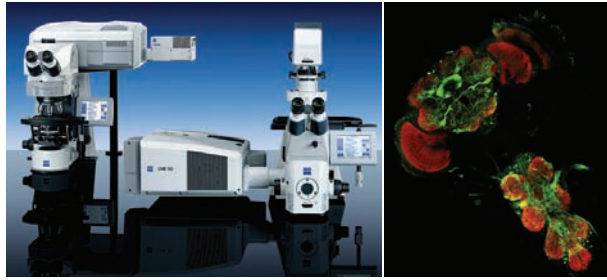


Carl Zeiss increases Fluorescence Sensitivity by 100%

Carl Zeiss is setting new standards for image quality in fluorescence microscopy with the launch of the LSM 780. The new microscope features radical, high quantum efficiency, GaAsP detector technology, which increases sensitivity by 100% compared to the class-leading Zeiss LSM710.

The LSM 780 will be of particular value to cell- and neuro-biologists, enabling weakly fluorescent or bleach-sensitive specimens or specimens with fine structures to be visualised more rapidly and with higher image quality. It also permits specimens that could not be satisfactorily examined in the past to be imaged at high resolution for the first time.



Zeiss offers three versions of the GaAsP detector technology: a 32-channel detector in the LSM 780 laser scanning microscope, an internal detector upgrade for

existing LSM 710 systems and an external LSM BiG upgrade module. All versions of the 32-channel GaAsP array permit traditional spectral imaging, photon counting with maximum sensitivity, and single molecule visualisation through fluorescence correlation spectroscopy (FCS) with one to six signal channels. The LSM BiG module gives LSM users a substantial increase in the flexibility of their imaging system and is a considerable advantage in multiphoton microscopy when fitted to the LSM 780 NLO or 710 NLO systems.

For more information [E. micro@zeiss.co.uk](mailto:E.micro@zeiss.co.uk)

Training future physiotherapists with SonoSite MicroMaxx® ultrasound systems

The SonoSite MicroMaxx point-of-care ultrasound system is being used for musculoskeletal visualisation to train undergraduate and postgraduate physiotherapists in the School of Health and Rehabilitation at Keele University.

Kim Major, a clinical physiotherapist and lecturer at the school, said, "We chose the MicroMaxx system to illustrate our lectures, showing muscles and soft tissue in action and how everything interrelates inside the body, instead of relying on two-dimensional textbooks. For our purposes, being able to delineate muscle is the key element and the MicroMaxx's image quality has allowed us to see almost everything we need. Its portability is a real boon because we need to be able to move the system from room to room, and it is easy to set up. We now use



the MicroMaxx in several undergraduate research projects when we effectively hand it over to the students, and the system's fairly indestructible nature is very reassuring. The five-year warranty is important in that respect, too. The image storage facilities have also been very useful for these projects." Kim concluded, "Ultrasound gives the students a much better understanding and it really speeds up the learning process for many of them."

For information and to register on SonoSite structured training courses, log on to www.sonositeeducation.co.uk

For more information about SonoSite products
T. 01462 444 800, E. uk-sales@sonosite.com

Epilepsy – I think my patients take their medication!

In discussions with those that treat epilepsy we often find a general belief that their patients adhere to the prescribed regimen of AEDs. Further discussion often reveals that this belief is not based on careful questioning of the patient. It therefore raises the question as to whether it is safer to assume that patients' adherence is poor rather than good. Indeed, non-adherence has been shown to be a common problem with several studies showing that adherence to AEDs typically ranges from 27% to 59%. It is not surprising that this can be an important factor in the effectiveness of the medication and studies report that seizure frequency is higher when adherence is poor. It is clear that a medication cannot be expected to work if the patient does not take it. Other studies show a preference towards a simpler once daily regimen. NICE suggest that, where appropriate, clinicians should consider the preferences of the patient and/or carers when individualising AED regimens. Once daily controlled release versions of valproate have, for example, been shown to be preferred by patients, improve adherence, reduce seizure frequency and improve clinical outcomes. There is an argument that to get the most out of an AED the prescriber should aim for a convenient presentation that makes it as easy as possible to gain concordance in order to help ensure an effective outcome.



For more information contact Beacon Pharmaceuticals on T. 01892-600930

EPDA and PAI launch Parkinson's Decision Aid

Deciding on drug treatments and how to manage the life of a person with Parkinson's (PWP) is not easy. Choosing the best way to live with the disease – in terms of both mental attitude and physical health – can be confusing for both the person with Parkinson's (PWP) and their healthcare professional. It requires excellent communication between both parties.

As a result, the EPDA and the Parkinson's Association of Ireland (PAI) have worked together to launch the Parkinson's Decision Aid (PDA), an online educational toolkit that seeks to put the PWP in the best possible position to make the right choices so they themselves can actively work with their healthcare professional to improve their quality of life and make informed choices together.

It is hoped the PDA will be rolled out in other parts of Europe over the next few years. It provides a wealth of up-to-date information about Parkinson's that has been researched and reviewed by European Parkinson's experts, and has been written in an easy-to-understand style for everyone.

The website has three core sections:

PD Essentials: Questions a PWP can ask their doctor and other healthcare professionals that will enable them to receive the right answers.

PD In depth: A huge library of researched and reviewed information to help PWPs live a better life as well as providing answers to the many questions they might have.

Later in Life: This section provides information for people who have lived with Parkinson's for some considerable time. The information provides answers to many complex issues they may have experienced, for example surrounding palliative care, end-of-life issues and a different life.

For more information see www.parkinsonsdecisionaid.eu.com

Nikon introduces new colour camera to Digital Sight series

Nikon has added the high speed DS-Vi1 colour camera to its market-leading range of Digital Sight cameras for microscopic imaging. The DS-Vi1 offers high frame rates and increased sensitivity for both multiple live image and sharp still image capture, making it ideal for high end biological research, clinical analysis and documentation as well as medical teaching use.

The DS-Vi1 features a 2-megapixel colour CCD with outstanding SXGA video display rates of up to 27 frames per second possible and effortless fast focusing. In addition, the DS-Vi1 offers high sensitivity and a wide dynamic range of more than 600:1, enabling the capture of clear, sharp images.

The DS-Vi1 can be combined, via a USB 2.0 interface, with either the stand-alone Nikon DS-L2 control unit or the DS-U2 PC control-based unit. The DS-L2 features a large 8.4 inch high-definition LCD monitor and allows live observation, camera control and image capture via simple on-screen menus without connection to a PC. In addition,



the DS-Vi1 can be controlled by Nikon's NIS-elements software. With the DS-U2 PC control unit, live images can be viewed, recorded, measured, processed, and analysed with integrated control of the camera and microscope peripherals.

For further information contact Nikon Instruments Europe, T. 0208 247 1718, E. info@nikoninstruments.eu

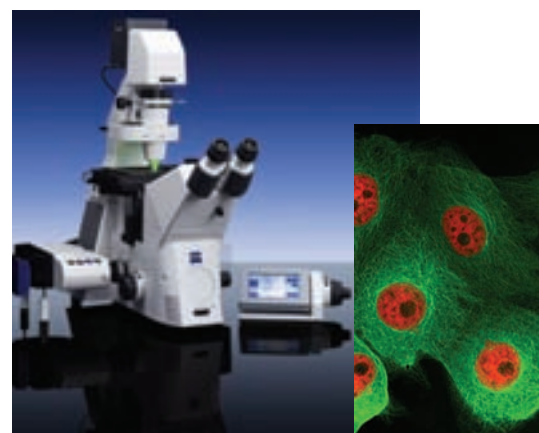
Carl Zeiss VivaTome makes Optical Sectioning Fast and Easy

Optical sectioning is the technique of choice for fluorescence imaging of biological specimens, providing highly-resolved, contrast-rich images even from thick living cells. However, its appeal has been limited by the cost and complexity of the systems and the sophisticated software and time-consuming processing required.

VivaTome, from Carl Zeiss, cuts through these barriers, combining the imaging speed of a spinning disk system with the light efficiency of structured illumination, pioneered by Zeiss with the award-winning ApoTome. Designed for life science applications where temporal resolution is a priority, VivaTome provides developmental and cell biologists with a fast, cost-effective tool to examine the dynamics of living specimens without extensive prior knowledge of optical sectioning.

VivaTome's structured illumination technique is one of the easiest and most efficient ways to implement optical sectioning capabilities into a white-light widefield system. Fast frame rates of up to 30 frames a second capture highly-dynamic processes in living samples, something only possible until now with advanced microscope systems.

For more information see <http://bit.ly/cSUcqr>



SonoSite supports regional anaesthesia training in the South West

The South West Regional Anaesthesia (SoWRA) Group runs a popular regional anaesthesia course, and is supported by SonoSite through the loan of equipment and training aids. This initiative is helping Trusts in Devon and Cornwall to expand their use of ultrasound for regional nerve blocks, as Dr Matthew Grayling, a consultant in anaesthesia at the Royal Devon and Exeter Hospital and secretary of SoWRA, explained, "Our aim is to promote local interest in regional anaesthesia techniques, using local expertise to provide cost-effective training and establish a good foundation in high quality anaesthesia care in the region. SonoSite and other manufacturers have been very generous by loaning equipment and teaching us to use their instruments, helping us to invest more in developing the course and providing a forum to improve regional nerve blocks in the South West."



For information and to register on SonoSite structured training courses, log on to www.sonositeeducation.co.uk
For more information about Sonosite products T. 01462 444 800.

The new INFINITY 1.4 Megapixel Ultra-Sensitive CCD Microscopy Camera from Lumenera Corporation

Vision Source has announced the release of a new ultra sensitive high colour fidelity CCD scientific camera from Lumenera Corporation. This newest USB 2.0 offering from the popular INFINITY family of microscopy cameras is an ideal solution for low light applications such as fluorescence, and where precise color reproduction is needed.

The INFINITY3-IU offers large $6.45\mu \times 6.45\mu$ pixels in a 2/3" format with a maximum resolution of 1392 x 1040. It employs the Sony ICX285 1.4 megapixel CCD sensor – the market leader for fluorescence and other challenging low light applications. In addition, the camera's near-perfect colour rendition makes it an excellent addition to any clinical laboratory. Suitable for both fluorescent and brightfield imaging, this camera offers an excellent price-to-performance ratio.

The camera's adaptability to vary resolution and frame rate requirements, combined with low noise performance and 8- or 12-bit pixel data mode, make the INFINITY3-IU an ideal camera for both live and fixed cell imaging. Live video preview allows for real-time focus; while auto exposure and auto/manual white balance efficiently capture your optimal image. This complete solution includes Lumenera's INFINITY CAPTURE and INFINITY ANALYZE software, and is offered with both colour and monochrome capability. Advanced camera control is available through a Software Developers Kit, while TWAIN and DIRECTX drivers ensure integration and compatibility with a variety of 3rd party software applications.

For more information see www.visionsource.co.uk

