

## Dynamic live cell and deep tissue imaging

Nikon Instruments has launched its new AIR MP Multiphoton and Confocal microscope system for high speed, high resolution and high sensitivity multiphoton excitation and confocal fluorescence imaging. The AIR MP allows for deeper, faster and sharper imaging, while remaining cell-friendly with fast resonant imaging at up to 420 fps.

This multiphoton imaging system features a high resolution galvanometer scanner and a high speed resonant scanner that is capable of frame rates from 30 fps at 512 X 512 pixels to as fast as 420 fps in band scan mode. New four channel non-descanned multiphoton detectors with higher sensitivity, reduced dark current and broad spectral range allow for real time unmixing of closely spaced probes for deep tissue and accurate, high contrast spectral imaging. This is especially

important in multiphoton imaging because of the overlap of emission spectra of probes and autofluorescence, which is often unavoidable when using a single laser line.

"The AIR MP can image deep within a specimen and image at video rates for full frame images or even faster for 32 line band scans," commented Stan Schwartz, vice president, Nikon Instruments, Inc. "This system is particularly well-suited for imaging deep within brain tissue where it is not possible to cut thin sections and keep circuitry intact to study neural phenomenon."

The Nikon AIR MP also features a one click auto-alignment of the infrared femtosecond Ti:sapphire multiphoton excitation laser. This device completely encloses the beam within the instrument from the laser to the objective lens – a huge improvement in operating safety.



Bright, high resolution imaging is provided by the newly introduced Nikon Lambda S (AS) objective series, featuring the highest numerical apertures (NA) for water immersion objectives yet. The CFI APO LWD 40X WI AS objective with NA 1.15 and a working distance of 610 microns incorporates Nikon's new Nano-crystal coat. This unique coat provides high transmissions over an expanded correction range.

For further information see [www.nikoninstruments.eu/A1R-MP-Multiphoton-Confocal](http://www.nikoninstruments.eu/A1R-MP-Multiphoton-Confocal)

## Genus Pharmaceuticals - the new name for Britannia

Over the following twelve months the Britannia company name will be changing to Genus Pharmaceuticals. The Britannia company brand will be phased out from all APO-go products and materials and replaced with Genus branding.

Genus Pharmaceuticals Ltd (the UK division of STADA Arzneimittel AG) acquired Forum Bioscience in August 2007, and with it, Britannia, which became consolidated into Genus on 1st October 2007, but continued to operate under the Britannia company brand name until December

2009. The name change completes the integration of Britannia into Genus, and the combined strengths leave a company which can provide a more robust financial platform for future APO-go products, services and accelerated developments so that healthcare professionals and their patients with PD can be better supported.

Sarah Woozley, APO-go's Marketing Manager comments, "Although the Britannia name has changed, the dedicated and friendly team who work on APO-go, with their vast experience,

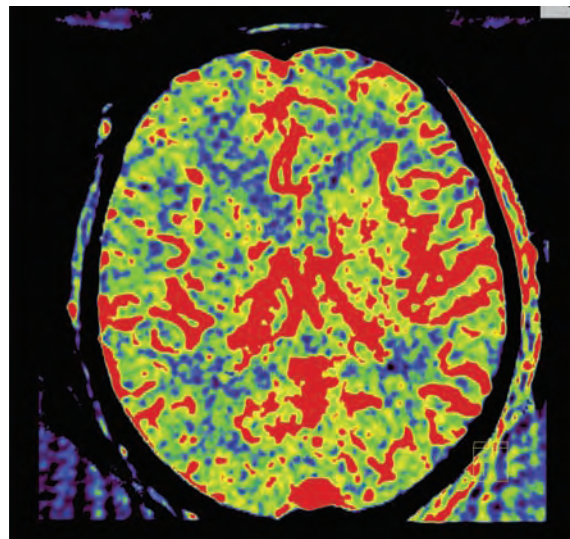
remain unchanged. The integration into Genus has enabled us to invest in future research, development and new technologies with the aim of making life simpler for our APO-go customers."

For further information contact  
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E. [info@genuspharma.com](mailto:info@genuspharma.com)

## Faster stroke treatment with new functional imaging application

To shorten the time from diagnosis to treatment in stroke patients, Siemens Healthcare has developed a new software application, which enables the visualisation of parenchymal blood flow during minimally invasive interventions in the brain for the first time. This feature assists the neuroradiologist in the treatment of stroke patients by displaying the condition of the cerebral tissue directly in the angio suite and is available on the Artis zee™ systems.

Minimally invasive techniques for stroke treatment involve guiding a thin catheter through the arteries of the brain to either deliver a drug to dissolve the blood clot or mechanically remove it. By displaying the current condition of the cerebral tissue directly in the angio suite, syngo® Neuro Parenchymal Blood Volume, Interventional Suite (PBV IR) assists in the accurate guidance of the catheter and is equally helpful for



Siemens Healthcare has introduced syngo® Neuro Parenchymal Blood Volume, Interventional Suite (PBV IR), which displays cerebral blood flow during interventional procedures.

tumour biopsy and treatment, tissue embolisation and vasospasm therapy.

The PBV information is generated via two C-arm rotations around the patient coupled with a steady state contrast injection. The sophisticated processing algorithms of the system use the resulting data to generate a neurological PBV map, which is available at bedside in less than 40 seconds.

Another benefit of the new software is that it is capable of providing blood volume data for the whole brain, unlike traditional CT acquisition and allows the clinician to review the information from any orientation. syngo Neuro PBV IR uses cone-beam CT technology (syngo® Dyna CT) to acquire the information required for such advanced tissue visualisation.

For further information please visit:  
[www.siemens.co.uk/healthcare](http://www.siemens.co.uk/healthcare)  
T. 01276 696338.

## High NA, long WD, wide FOV objective for neuroscience

Nikon has added the CFI Apo LWD 25X objective to its series of low refractive index, high numerical aperture (NA) objectives for use in biological applications. Employing Nikon's ultra Nano-crystal coat technology, the new objective features high optical performance across the widest spectral wavelength with high chromatic corrections for sharp contrast imaging. This, combined with a high NA, wide field of view and long working distance make it ideal for neuroscience imaging.

Neuroscience and other applications require a large field of view for studying samples such as brain slices and blood vessels. In addition, live specimens such as tissue demand a long working distance. A high NA is extremely important for high resolution imaging of neurons and their axons; furthermore, NAs higher than 1.0 are essential to provide a high axial resolution to go deep into the tissue. Previously, manufacturers have found it difficult to make high performance objectives that combine all these features. Now, designed and optimised specifically for neuroscience and similar applications, the Nikon CFI Apo LWD 25X not only features a wide 22mm field of view and an unrivalled working distance of 2.0 mm, but also an extremely high NA of 1.10. In addition, a 33° approach angle on the lens provides easy access for micromanipulators in electrophysiology applications. An adjustable correction ring, for both non-coverglass and coverglass observations, reduces the effects of light scattering when imaging deep into specimens.



For further information see [www.nikoninstruments.eu/products/Optics-Objectives](http://www.nikoninstruments.eu/products/Optics-Objectives)

## New website for The Ring Chromosome 20 Foundation

In 2009 the r(20) website recorded a record number of hits from medical professionals and individuals from all four corners of the world including Japan, Australia, Europe, India as well as North and South America.

In response the updated website [www.ring20.org](http://www.ring20.org) now has multiple translations of key information including French and Spanish, as well as a multilingual essential information CD-Rom, which can also be ordered from the site. There is also the added feature of an online members' message board for people to share and exchange their own personal experiences.

Another important internet development has been the inclusion of video clips showing top medical professionals from all over the world discussing r(20) syndrome, at the first international symposium dedicated to r(20) syndrome which was held at the 28th International Epilepsy Congress in Budapest. This helps individuals and professionals who are not able to travel to see important, up to date information first hand, without the financial or logistical burden of travelling long distances.



For further information, E. [info@ring20.org](mailto:info@ring20.org), or T. 01708 403 620.

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Adverse events should be reported. Reporting forms and information can be found at [www.yellowcard.gov.uk](http://www.yellowcard.gov.uk). Adverse events should also be reported to Merz Pharma UK Ltd at the above address or by e-mail to [medical.information@merz.com](mailto:medical.information@merz.com) or by calling on 0845 009 0110.



Please refer to Summary of Product Characteristics (SmPC) before prescribing particularly in relation to side-effects, precautions and other contra-indications. **Marketing Authorisation Holder:** Merz Pharmaceuticals GmbH, 60048 Frankfurt Main, Germany. **Legal Category:** POM. **Further information available from:** Merz Pharma UK Ltd., 260 Centennial Park, Elstree Hill South, Elstree, Hertfordshire WD6 3SR. **Date of preparation of item:** January 2010. 1144/XEO/JAN2010/JE.

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