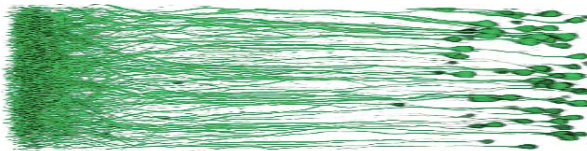


## Multiphoton laser scanning microscope

Zeiss has overcome the challenge of imaging deep inside living tissues with the launch of the LSM 5 MP multiphoton laser scanning microscope. The instrument uses longer-wavelength, femtosecond lasers to create and detect fluorescence signals at a depth of up to 500µm, illuminating cellular structures in great detail whilst eliminating phototoxic cellular damage caused by high intensity light.

The LSM 5 MP is based on the recently launched Axio Observer inverted research microscope platform and takes advantage of its sophisticated optical features. Highly efficient coatings on the optics ensure minimal power losses of the directly coupled femtosecond lasers while advanced filter technology guarantees efficient suppression of stray and excitation light and extremely sensitive detection of fluorescent signals.

The W Plan-Apochromat objective lens



An image showing YFP-expressing cortical neurons of the mouse from layers IV and V, courtesy of M. Fuhrmann and J. Herms, Department of Neuropathology and Prion Research, Ludwig Maximilians University, Munich, Germany.

boasts 20x magnification at a numerical aperture of 1.0 and a working distance of 2mm. It is ideally suited to multiphoton electrophysiology experimentation, allowing larger areas to be imaged with unsurpassed resolution and brilliance. The specially designed objective lenses feature optical correction in the near infra red (NIR) 700-1100nm spectral range to reduce absorption and scatter. This allows the NIR laser to penetrate tissue to greater depths working in ultrashort pulses of up to 170kW at a frequency of 76 to 90 MHz.

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

## New ultrasound device for neurovascular, vasospasm and PFO monitoring from Spencer Technologies

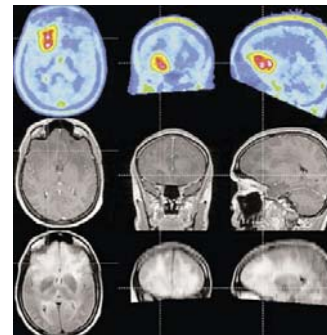
Spencer Technologies is dedicated to developing innovative ultrasound systems to aid the diagnosis in neurovascular disease and monitoring for PFO using patented Power M-Mode technology and clinically proven embolus detection algorithms. The new ST3 – PMD150 is the only system designed for routine PFO detection with dedicated protocols and report formats. Ease-of-use is key to the ST3 operation allowing the clinician to focus on the patient and work flow in a busy clinic. No other company is focused more on neurovascular diagnosis and PFO detection than Spencer Technologies. The ST3 – PMD150 is a compact portable system with a host of features not available on competitors units.

For more information contact Pulse



Medical, Tel/Fax. 01482 473803 or  
E. [sales@pulsemedical.co.uk](mailto:sales@pulsemedical.co.uk) or Spencer  
Technologies Europe, Tel: 01420 88688 or  
E. [sales@spencertechnologies.eu](mailto:sales@spencertechnologies.eu) or visit  
[www.spencertechnologies.com](http://www.spencertechnologies.com)

## Newworld's first system capable of simultaneous imaging of the brain by MRI and PET demonstrated by Siemens



Siemens Medical Solutions showed a prototype for the world's first fully-functioning imaging system capable of performing simultaneously Magnetic Resonance Imaging (MRI) and Positron Emission Tomography (PET).

Siemens Medical Solutions has shown a prototype for the world's first fully-functioning imaging system capable of performing simultaneously Magnetic Resonance Imaging (MRI) and Positron Emission Tomography (PET). The first in-vivo human brain simultaneous MR-PET images were acquired in the Siemens facilities in USA. Testing of this new prototype MR-PET will start before the end of 2007.

MR-PET presents a leap forward in imaging capabilities. Siemens is the first company to have realised an MR-PET prototype, which brings the exceptional soft tissue contrast and high specificity of MR together with PET's excellent sensitivity in assessing physiological and metabolic state. The first MR-PET images were acquired with support of Dr David Townsend and Dr Claude Nahmias, both from the University of Tennessee, USA, and Dr Heinz-Peter Schlemmer, Dr Claus Claussen and Dr Bernd Pichler, all from the University Tübingen in Germany. MR-PET has the potential to become the imaging modality of choice for neurological studies, certain forms of cancer, stroke and the emerging study of stem cell therapy.

For further information Tel. 01344 396317 or see [www.siemens.com](http://www.siemens.com)

## BUPA Hospital Manchester increases clinical capabilities with SOMATOM Emotion 16



Pictured by the SOMATOM Emotion are (L to R): Sue Branfield, Imaging Manager, Dr Simon Taggart, Consultant Physician, Dr Peter Norburn, Consultant Radiologist, Dr Sylvia Rimmer, Consultant Radiologist, Ole Gunnar Solskjaer, Manchester United FC, Janine Brown, Radiology Administrator, Cathryn Skinner, Specialist Radiographer and Saima Naheed, Radiographer.

BUPA Hospital Manchester has installed the SOMATOM Emotion 16 from Siemens Medical Solutions to help expand its services, produce faster imaging and enhance its clinical capability. The new equipment was officially opened by Ole Gunnar Solskjaer of Manchester United FC.

The SOMATOM Emotion performs routine clinical CT with great speed and efficiently integrating high quality imaging applications into daily clinical practice. With the Emotion's flexibility, clinicians are able to perform routine examinations, such as chest, abdomen and head, with the option for more advanced

applications - like syngo Neuro DSA - which greatly improve the diagnostic workflow.

Sue Branfield, Imaging Manager at BUPA Manchester said, "The SOMATOM Emotion 16 significantly improves the patient experience and allows us to address the more demanding needs of the physicians. The technology, which generates detailed images in a significantly short period of time, ultimately provides our patients with more accurate diagnoses and our staff with improved throughput."

For more information Tel. 01344 396317 or see [www.siemens.com](http://www.siemens.com)