New TaqMan, Assays for Detection and Quantitation of Human MicroRNA

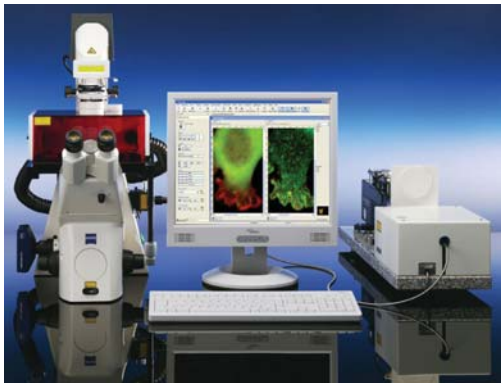
Applied Biosystems has launched its TaqMan, MicroRNA Assays for the detection and quantitation of mature human microRNA (miRNA) expression levels, a promising new area of genomic research. miRNAs are a recently discovered class of small RNA molecules that represent a new layer of post-transcriptional gene regulation that is not yet fully characterised.

These novel assays eliminate major challenges in detecting and quantifying miRNAs and are expected to stimulate research in areas such as cancer, stem cell research, and developmental biology. Based on the industry-standard TaqMan reagent-based chemistry, Applied Biosystems' proprietary stem-loop reverse transcriptase assay technology, and real-time PCR, the assays provide highly sensitive and reproducible data through a simple two-step process.

Unlike other conventional methods such as hybridisation arrays, the TaqMan MicroRNA Assays allow researchers to discriminate between mature miRNA and its precursor form. The assays require very small starting samples (1-10 nanograms of RNA or equivalent) allowing researchers to conserve valuable samples and simplify the analytical process.

For more information about the TaqMan MicroRNA Assays see http://mirna.appliedbiosystems.com

Laser TIRF Imaging System



A microscope capable of routinely visualising molecular level dynamic processes at the cell membrane while maintaining optimum specimen incubation conditions has been introduced by Carl Zeiss. The Laser TIRF Imaging System is the only system to combine specimen incubation over the long time periods required in many of these live cell experiments with multi-colour TIRF, epi-fluorescence and transmitted-light contrasting techniques under laser safety conditions. Each of the four stage options (fixed, heating, mechanical and scanning) is available with incubation.

The new microscope is the first to offer the combination of TIRF and transmitted-light contrasting techniques, such as DIC and brightfield, which enables sequential recording of two image pairs per second. By selectively exciting cellular fluorophores adsorbed, adhered, or bound to the surface and combining it with conventional epi-fluorescence, researchers can relate surface effects to internal cellular structures.

The Laser TIRF is also said to be the first TIRF system to offer rapid laser line changes, and Its unique geometry ensures that TIRF is maintained while switching wavelengths.

For further information contact: Aubrey Lambert, Carl Zeiss UK, Tel. 01707 871233, E. a.lambert@zeiss.co.uk

UCL Launches New Institute of Behavioural Neuroscience

University College London is about to celebrate the launch of its new Institute of Behavioural Neuroscience, the IBN. The IBN is currently a virtual gathering of scientists, but a new suite of laboratories to be built in the coming year in the Bedford Way Psychology building will turn the virtual institute into a real one. The suite will house a cluster of research groups whose collective focus is on trying to unravel the neural circuits and processes that underlie behaviour. The launch is to take place in May, will and consist of a workshop, and a plenary lecture by the renowned behavioural neuroscientist and author Joseph LeDoux, with a champagne event and poster session afterwards. Interested parties should visit the website for further details.

For further information on the IBN and its launch, see www.ibn.ucl.ac.uk

Neurodegenerative Diseases

Neurodegenerative Diseases is a bimonthly, multidisciplinary journal for the publication of advances in the understanding of neurodegenerative diseases, including Alzheimer disease, Parkinson's disease, amyotrophic lateral sclerosis, Huntington disease and related neurological and psychiatric disorders. Neurodegenerative Diseases publishes results from basic and clinical scientific research programmes designed to better understand the normal functions of genes and proteins involved in neurodegenerative diseases, to characterise their role in pathogenic disease mechanisms, to model their functions in animals and to explore their roles in the diagnosis, treatment and prevention of neurodegenerative diseases. It is Karger's firm belief that successful strategies for novel treatments of neurodegenerative diseases will emerge from the intelligent integration of basic neurobiology with clinical sciences. Therefore, Neurodegenerative Diseases will accept high-quality papers from a broad spectrum of scientific research areas ranging from molecular and cell biology to neuroscience, pharmacology, genetics and the clinical sciences.

For more information see www.karger.com/ndd

Join people affected by MS from across the UK

At MS Life (21st April, Manchester) you can find out about the latest in scientific research and alternative therapies. You can talk to other people about juggling a social life with the symptoms of MS or patients can talk to an MS nurse about the best care options for their circumstances.

MS Life can help patients through the maze of MS information giving the opportunity to get relevant information. It is also a chance for them to share their experiences with others who understand what living with MS is like.

At the event 100 exhibitors will be separated into 6 zones: research, support, interactive, employment, leisure and mobility. Within these zones there will be everything from cookery demonstrations to Reiki sessions, a web café and a smoothie bar as well as all the information and advice that is currently available for people affected by MS.

ms life
Manchester 2006
msconvention.org.uk

To book your place go to www.msconvention.org.uk

Gateway to the Network of MS Services – Practical Advice for Maximising the Wealth of MS Resources

Biogen Idec have developed an educational programme on Multiple Sclerosis, Disease Modifying Therapies, national policy and guidelines related to MS.

A ready-made CD-ROM resource is designed to: Provide essential information about MS, including diagnosis, management, treatments and guidelines; Facilitate improved communication and efficient referrals between primary and secondary care; Prompt primary and secondary care to map out local services and referral pathways in order to identify barriers and appropriate solutions; Ensure all Healthcare Providers are aware of the available local services and points of contact; Aid both primary and secondary care and NHS managers to implement the National Service Framework for Long Term Conditions; Be adapted to local requirements by individual Healthcare Professionals.

The material for this resource was developed from advisory forums conducted among Healthcare Professionals, from both primary and secondary care, with an interest in MS.

Copies of the CD ROM can be obtained from Medical Information at Biogen Idec, Foundation Park, Maidenhead, Berkshire, SL6 3UD or Tel. 01628 501000.

This resource is supported by the Primary Care Neurology Society.

Kings College Hospital NHS Trust Installs Two Siemens Arcadis Varic Systems

Kings College Hospital NHS Trust has improved workflow in its Day Surgery Unit and its Neuroradiology department following the installation of the Arcadis Varic. From patient registration to image documentation, it significantly reducing the operating room preparation time. As syngo is DICOM compliant, the Arcadis Varic systems have enabled Kings College Hospital NHS Trust to integrate with PACS, allowing both departments to operate in a completely filmless environment.

Pictured with the ARCADIS Varic C-arm at The Kings College Hospital, are (L to R), Steve Bibby, Neuro-radiographer, Lorna Thomson, General Radiographer, Tej Bangay, PACS Manager, Geraint Evans, Neuro-radiographer, Tim Aseervatham, Neuro-radiographer and Gail Neame, General Radiographer.

As Kings College Hospital already uses Siemens syngo based equipment, the Arcadis Varic system enabled staff to transfer their working knowledge of existing equipment to the new system – reducing training time. The Varic offers superb user-friendliness, with its compact, lightweight and ergonomic design providing staff with maximum manoeuvrability in tight environments during surgical procedures, while its use of intelligent colour encodings ensures fast and efficient user orientation.

The Neuroradiology Department has added the Varic as a third imaging system to increase patient throughput and reduce waiting lists.

For more information contact Mike Bell, Siemens, Tel. 01344 396317.

Headway Challenges for 2006

Why not challenge yourself in 2006 and take part in one of these exciting Headway events? Take part in a once in a lifetime trek or cycle ride or perhaps run a marathon whilst at the same time raising money for Headway – the brain injury association.

Dates for 2006:

- 13 - 21 March - Sahara Trek
- 21 – 25 June – London to Paris Cycle Ride
- 18 - 26 August - Iceland Trek
- 10 September – Experian Robin Hood Marathon and Half Marathon
- 14 - 23 September - Peru Trek
- 29 - 10 November - Vietnam Cycle Ride

Skydiving with the Red Devils!

Skydiving with the Red Devils was extremely popular last year and Headway now has dates between March through until October 2006 at sites in Nottinghamshire, Gloucestershire and Fife.

Headway also arranges white water rafting, parachuting and Outward Bound weekends as well. If you are interested in taking part in one of these events and would like more information please call Genna or Rachel at Headway on 0115 924 0800.

Laser Scanning Module Doubles Experimental Versatility

The Zeiss LSM DuoScan combines speed, accuracy, sensitivity, specimen penetration and flexibility with minimal specimen damage. The module adds a second laser scanner to the award-winning LSM 510 META or LSM 5 LIVE laser scanning microscopes. The dual-output, independently-adjustable lasers allow simultaneous stimulation and confocal observation while optional multi-photon microscopy preserves living tissue allowing observation without photodamage.

"Capturing fast cellular reactions occurring during or immediately after photomanipulation without a time lag will open up applications such as FRAP, FLIP, FLAP, photoactivation, photoconversion and uncaging to further development," says Aubrey Lambert, Zeiss UK marketing manager. "All rely on flexible sample photomanipulation to push back the frontiers of biomedical science and LSM DuoScan is the perfect partner."

The LSM DuoScan's point scanner offers a high degree of flexibility in photobleaching and can define multiple regions of interest (ROI) with pixel accuracy in all photomanipulation applications. This ensures that areas outside the area chosen for photobleaching are not damaged. High speed FRAP and FLIP experiments can be conducted at a variety of wavelengths, even when used with fast, parallel, multi-channel image acquisition. Accurate ROI micromanipulation also ensures excellent precision and flexibility in photoactivation, photoconversion and uncaging experiments. Selective activation of fluorescent proteins is a further experimental possibility opened up by the LSM DuoScan photomanipulation unit.

For further information contact: Aubrey Lambert, Carl Zeiss UK, Tel. 01707 871233, E. a.lambert@zeiss.co.uk