3-D SUPERRESOLUTION STED SYSTEM

The 3D STED system Leica TCS SP8 STED 3X achieves resolutions below the diffraction limit in lateral as well as axial directions. It offers the freedom to optimize resolution in all dimensions and to choose the setting that optimally fits the scientific question. The system is freely adjustable for the best lateral resolution, best vertical resolution, and smallest confocal volume. Additionally, Leica TCS SP8 STED 3X offers multiple depletion laser choices that open up the spectrum of visible light for confocal superresolution and give improved capabilities for research imaging. The investigation of subcellular architecture and cell dynamics in living cells is an exciting challenge in life science research. STED (Stimulated Emission Depletion) is the only purely optical microscopy technology that yields resolution of structures below 50 nm without data processing. The extension of STED technology to the third dimension and the freedom to use even more fluorophores raises superresolution to a new level.

Leica
For info: +49-621-7028-2801  |  www.leica-microsystems.com

SODIUM THIOCYANATE PRETREATMENT REAGENT

The new Sodium Thiocyanate Pretreatment Reagent is a convenient 1M liquid formulation of NaSCN for pre-treating tissue samples prior to application of nucleic acid probes for cytogenetic assays. The product is available in a 1 L bottle for Coplin jars or staining dishes and a 4 L container with flow control spout for filling baths on the Little Dipper Processor and VP 2000 instruments. No dilution is required and the reagent can be stored at room temperature. The product joins an expanding line of FISH slide processing products from SciGene including FISH Wash Buffers, CytoZyme Stabilized Pepsin, and CytoBond Removable Coverslip Sealant.

SciGene
For info: 408-733-7337  |  www.scigen.com

DEEP-WELL MICROPLATES

New generation heat transfer plates for centrifugal evaporators enable almost any deep-well plate to be dried up to 50% faster than previously possible. Evaporation from microplates, especially deep-well plates, can be extremely slow. The design of deep-well plates makes it particularly difficult for an evaporator system to transfer enough heat for rapid drying, especially with higher boiling point solvents such as water or DMSO. In addition, often the wells in deep-well plates are supported above the level of the skirt and need support to prevent the plate from deforming in a centrifugal evaporator. The new heat transfer plate design has a central flexible pad that deforms and molds itself to the exact shape of your deep-well plate. This intimate contact achieves the same level of heat transfer as from specially cut aluminum heat transfer plates but at a much lower cost.

Genevac
For info: +44-(0)-1473-240000  |  www.genevac.com

CMOS CAMERA

An alternative to traditional CCD cameras, the optiMOS Scientific CMOS (sCMOS) camera captures fast cellular dynamic events across a larger field of view without compromising sensitivity. Many cellular mechanisms occur on short time scales and emit very low luminescence signals when fluorescently labeled. Featuring faster frame rates and lower noise, optiMOS was designed as the budget friendly CCD alternative that combines speed with high resolution and increased sensitivity. Capturing fast cellular dynamic events such as vesicle trafficking requires high speeds, a large field of view and low read noise—a combination of features that CCD cameras simply cannot deliver. The optiMOS sCMOS camera offers the following features: 2.1 megapixels at 100 frames per second (FPS), 45% larger field of view than standard 1.4 megapixel fluorescence CCD cameras, <2e- of electronic noise enables high frame rates without compromising sensitivity, and full 100 FPS streaming to disk without expensive complex RAID 0 configurations.

QImaging
For info: 604-530-5800  |  www.qimaging.com

CARDIOTOXICITY KIT

The EarlyTox Cardiotoxicity Kit is a fast, simple, and reliable fluorescence-based kit for identifying cardiotoxicity of drug candidates early in the discovery process. This allows researchers to prioritize lead compounds and drug candidates, and direct medicinal chemistry efforts sooner, improving productivity and reducing costs associated with downstream safety testing. The kit may also enable the discovery of new cardiac drug candidates. The EarlyTox Cardiotoxicity Kit measures changes in cytoplasmatic calcium which are associated with cardiomyocyte beating. The kit combines a novel calcium sensitive dye and proprietary masking technology, resulting in the largest dynamic range and enhanced discrimination of beat pattern detail. Unlike other calcium dyes, the new dye formulation minimizes nonspecific effects on beat characteristics. The optimized calcium-sensitive dye formulation binds with calcium ions in the cell cytoplasm, enabling measurement of any changes in calcium concentration. The masking technology remains outside the cell and acts to reduce extracellular background fluorescence.

Molecular Devices
For info: 800-635-5577  |  www.moleculardevices.com/carditox