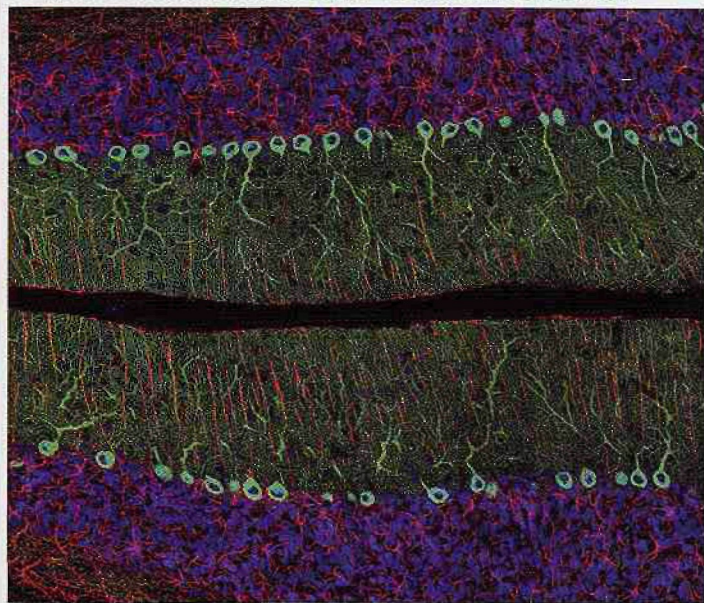


## INDUSTRY NEWS

## NIKON'S 28TH INTERNATIONAL SMALL WORLD WINNERS

**SELECTED** The results are in. An independent four-person judging panel has chosen 20 winners of the Nikon International Small World Photomicrography competition from a group of submissions that have more than doubled over last year's. The day-long judging process consisted of identifying and evaluating entries encompassing a wide range of fields including industrial, chemical and biological.



The winning image of the 28th Annual Nikon International Small World Competition, an eclectic combination of reds, blues and greens, looks more like something you would see hanging in an art gallery than an image used in laboratory research. The section of a rat cerebellum, taken by Mr. Thomas Deerinck of La Jolla, California, uses fluorescent dyes to create a striking image that leaps off the page and emphasizes the beauty in the scientific world.

Mr. Deerinck's winning image was derived from ongoing work at the National Center for Microscopy and Imaging Research at the University of California, San Diego to develop methods and technologies for large-scale high-resolution brain mapping using a variety of imaging techniques. His research will provide scientists with information enabling them to gain insight into the causes and potential cures for a wide range of illnesses such as Alzheimer's and Parkinson's disease.



Third Prize: *Lichophora flabellata* (a marine diatom) taken in phase contrast. Wim van Egmond, Rotterdam, The Netherlands.

Hitachi High Technologies America showcased two new products this year at M&M to celebrate the merger of Nissei Sangyo America, LTD, Hitachi Instruments Inc and Semiconductor division of Hitachi America, Ltd. The **S-4800 Field Emission SEM** compliments the outstanding performance of the popular S-4700. The S-4800 offers improved low voltage performance coupled with a larger chamber and 5 axis motorized 110mm X 110mm stage. The large specimen exchange accepts 8-inch diameter samples with a new quick release sample exchange rod. A new super EvB filter has improved the collection efficiency by four times that of the S-4700, whereby optimizing signal detection of SE and BSE information. A new easy-to-use GUI, higher screen resolution, eco-mode, contamination free TMP/Dry Pumps system, and a newly designed vibration resistant frame make the S-4800 the most powerful analytical FESEM on the market. Shown for the first time at M&M was Hitachi's newest addition to the Variable Pressure SEM arena. The S-3600N offers an extra large chamber with a 5 axis motorized computer-eucentric 110mm X 150mm stage. Large, heavy, wet, oily or dirty samples can be examined without compromising performance. Five horizontal and 3 incline chamber ports provide ample access for multiple analytical detectors. Shown in Hitachi's large theater was PCI's WAM (Wide Area Microscopy) Collaboration and Remote Microscopy demonstrations of the **S-3500N Variable Pressure SEM** located in Toronto, Canada. Please log on to [www.hitachi-hhta.com](http://www.hitachi-hhta.com)

Leica Microsystems displayed its **Spectral Confocal Microscope**: TCS SP2-AOBS at the American Society for Cell Biology-2002 meeting. This instrument's revolutionary, filterless scanhead greatly improves system efficiency; yielding less damage to living cells and allowing visualization of dimmer samples and overlapping fluorescent dyes. The technology of the TCS SP2-AOBS is uniquely available from Leica. The new **AS MDW Multidimensional workstation** with fully automated multiple wavelength, Z stack, image acquisition and 3-D construction with deconvolution was also shown, as well as the complete family of automated microscopes and system solutions such as the DM IRE2 inverted, DM RXA2 upright, and AS LMD Microdissection System. Leica's new MZ16A stereomicroscope, the first to offer motorized zoom, automatic and pre-calibrated measurement functions at every magnification, and a digital LED information display was displayed. The MZ16A reveals 3-dimensional structures as small as 600 nanometers for the very first time. [www.leica-microsystems.com](http://www.leica-microsystems.com)

PERKIN ELMER LIFE & ANALYTICAL SCIENCES launched **UltraVIEWRS**, the latest member of the UltraVIEW family of confocal Live Cell Imagers at the American Society for Cell Biology-2002 meeting. UltraVIEWRS offers the fastest multi-dimensional confocal imaging capability. Users can perform fast 4D and 5D confocal imaging of living samples in real-time. The system uses the new, advanced **CSU21 dual-Nipkow disk confocal scanner**. Sample scan speeds can be varied up to 1000 frames per second. Proprietary systems synchronization permits precise, optimized control of the confocal head spin speed, camera acquisition, wavelength and piezo z-positioning to allow high acquisition rates to be achieved while preserving image quality. **AOTF excitation wavelength control** is used for both rapid imaging of multi-labeled samples, and control of individual line lines for balanced signal intensities. An improved light path results in up to 2.5-fold better signal/noise ratios that allow high-speed acquisition in low light conditions. For more information, please visit [www.livecellimaging.com](http://www.livecellimaging.com), or call: +1-800-551-2121. ■