Compact Microscope

ZEISS has introduced a compact microscope for digital teaching and routine lab work. ZEISS Primostar 3 is a robust upright light microscope developed for daily work in a classroom or in a lab for tissue and sample examination in histology, cell biology, food, or microbiology, etc. It is designed for long-term use and extreme durability. The unit is simple to operate, so that students and laboratory staff can spend more of their time exploring rather than fiddling with knobs. It is easy to learn, and the setup is quick and convenient with a plug-and-play installation. Users can choose either a 30-W halogen bulb or an energy-saving LED bulb with a stable color temperature and illumination intensity. Or, they can add on the fluorescence tube and turn ZEISS Primostar 3 into an LED fluorescence microscope. ZEISS Primostar 3 offers the advantages of an integrated 8-megapixel microscope camera. With the ZEISS Labscope imaging app, it is easy to connect microscopes in classrooms to each other.

ZEISS
For info: +49-(0)-7364-20-3800
www.zeiss.com

3D Cell Analysis Software

Used with Olympus confocal laser scanning microscopes, such as the FLUOVIEW FV3000 system, NoviSight 3D cell analysis software provides images of cell clusters down to the nuclei. The software’s True 3D technology uses multiple microplate images to provide accurate morphology data and the ability to quantitatively analyze the effect of medications, including growth suppression and cell-survival rates. A range of parameters can be easily and precisely measured, enabling researchers to count the number of cells that have suppressed growth, proliferated, or died. NoviSight 3D also makes it easy to compare the effects of different medications at various concentrations. Results—including recognition, analysis, and statistics—are displayed on a single screen. Users can view the quantitative data as a scatterplot, heat map, or graph, and click on a point in the graphical display to automatically open the corresponding image. It is easy to switch between 2D and 3D views of the sample, and data are easily exported as CSV or FCS files for further analysis.

Olympus
For info: 301-325-3713
www.olympus-lifescience.com/en

Fixable Mitochondrial Stain

MitoView Fix 640 is a new far-red fluorescent live-cell mitochondrial stain that retains crisp and specific staining after fixation for downstream immunofluorescence protocols. The nontoxic, cell membrane-permeant dye rapidly accumulates in the mitochondria of live cells and has a reactive group that covalently attaches to proteins inside the mitochondria. This results in stable mitochondria staining that lasts for days in live cultures, is well retained after fixation with formaldehyde or methanol, and withstands permeabilization. Staining with MitoView Fix 640 shows better specificity after fixation as compared to MitoTracker Deep Red and other mitochondrial stains currently available. MitoView Fix 640 is ideal for the Cy5 channel and is offered in 1 or 10 units of 50 μg.

Biotium
For info: 800-304-5357
biotium.com

8-Well Chamber Slide

ibidi’s top-selling, all-in-one 8-well chamber slide, the µ-Slide 8 Well, now has extra-high individual wells to keep cross-contamination between wells as low as possible when performing high-resolution, cost-effective cell-culture experiments. With its thin ibidi Polymer Coverslip bottom, the µ-Slide 8 Well high allows for excellent cell adhesion onto the tissue culture–treated surface. In addition, it has the highest optical quality and is ideally suited for a variety of microscopic techniques, such as widefield fluorescence, confocal microscopy, and differential interference contrast (DIC). For scientists who perform special microscopic applications, such as total internal reflection fluorescence (TIRF) and superresolution microscopy, ibidi has created the µ-Slide 8 Well high Glass Bottom with a #1.5H D 263 M Schott glass. It is also available as a sticky-Slide 8 Well high without any bottom, enabling the researcher to mount any chosen substrate. The entire µ-Slide 8 Well high family is ideal for experiments with small cell numbers and low reagent volumes. Scientists who would like to test one of the µ-Slide 8 Well high variations with their own experiments can request free samples.

ibidi
For info: 844-276-6363
ibidi.com

SLM-Based All-Optical Solution

The HoloStim-3D is an all-optical solution that facilitates simultaneous imaging and photostimulation of hundreds of individual cells in 3D, enabling novel insights into the roles of neural subtypes and individual neurons in brain circuits and behavior. A compact module, the HoloStim-3D seamlessly integrates with Scientifica’s HyperScope, a multiphoton imaging system, creating a fully integrated spatial light modulator (SLM)-based photostimulation solution. With its industry-leading resolution, cell bodies and subcellular structures can be specifically targeted with less off-target activation than other systems on the market, generating cleaner, more accurate data. HyperScope and HoloStim-3D allow different imaging and stimulation wavelengths to freely combine for excitation and imaging of target cells expressing different opsins. Full integration with Scanimage software means that the HoloStim-3D is easier to adopt than ever before, making it an excellent choice for researchers who want to start experimenting right away.

Scientifica
For info: 609-454-6069
www.scientifica.uk.com/products/scientifica-holostim-3d