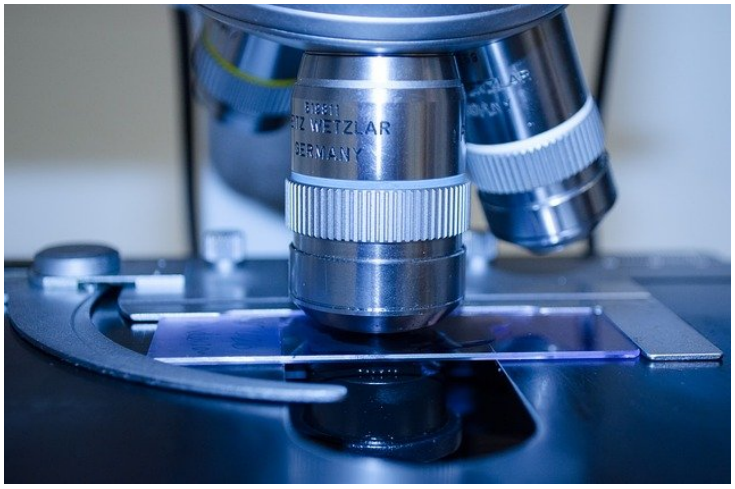
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A new confocal laser scanning microscope by ZEISS

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A new confocal laser scanning microscope by ZEISS



ZEISS has introduced a new compact confocal laser scanning microscope for high-end confocal imaging, ZEISS LSM 800. With highly sensitive GaAsP (Gallium arsenide phosphide) detector technology and fast linear scanning, the new microscope provides high image quality and offers enhanced productivity and throughput, as well as greater flexibility in live cell imaging. The optional Airyscan module delivers 1.7 times higher resolution and higher sensitivity than conventional confocal microscopes.

ZEISS LSM 800 is continually monitoring and calibrating the scanner position to guarantee a stable field of view and equal pixel integration times over the whole field of view. The patented linear scanning regime gives a constant signal-to-noise level and uniform exposure to the illuminating laser throughout the scanned area, including manipulated regions of interest.

Gallium arsenide phosphide photomultiplier tubes (GaAsP PMTs) display high light collection efficiencies over a broad spectral range. Their low dark noise levels also make them the ideal tool for detecting faint signals in low expressing cells. The gain in signal-to-noise ratio (SNR) will increase productivity by achieving faster scan speeds while preserving high image quality. Low laser powers avoid photobleaching and phototoxicity in live cell imaging applications.

It requires minimal setup requirements, maintenance, and self-calibration paired with low overall energy consumption.

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