IXplore Spin

Confocal Imaging Microscope System

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Confocal Imaging of Rapid Cell Dynamics

The IXplore Spin microscope system's advanced spinning disk unit contributes to a large field of view, fast 3D confocal image acquisition, and prolonged cell viability in time-lapse experiments.

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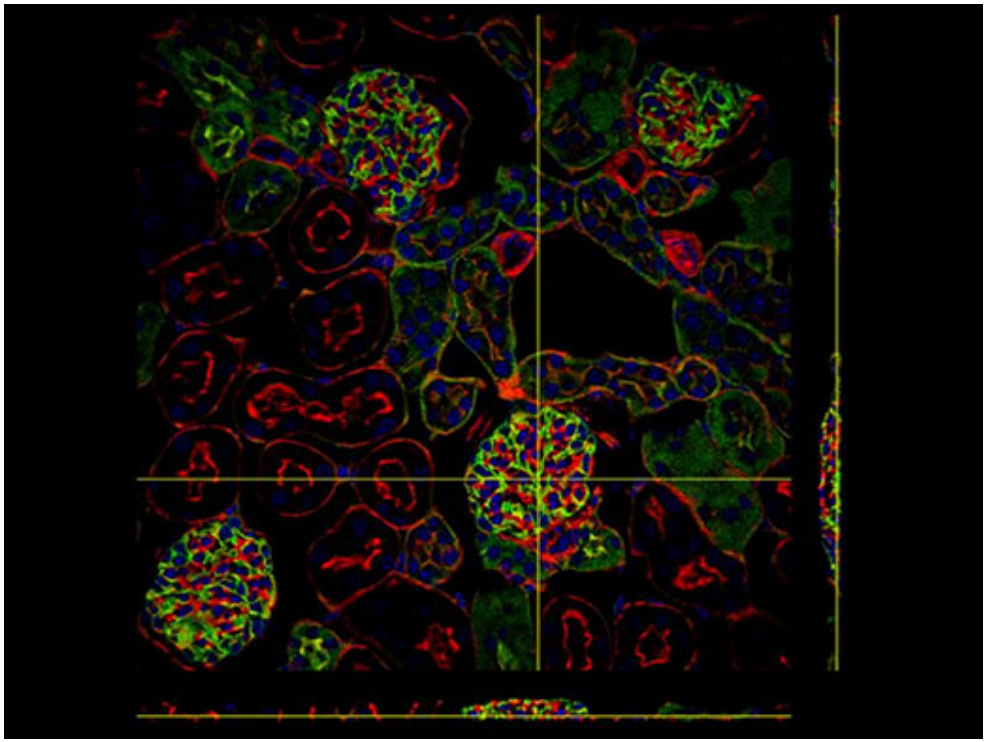
The Yokogawa CSU-W1 spinning disk unit helps you acquire high-speed confocal images with a larger field of view than traditional confocal microscopes. Olympus' TruSight deconvolution algorithms can be applied to improve image resolution, contrast, and dynamic range for strikingly clear 3D images, even at greater observation depths.



*Kidney Section Slide (Blue: DAPI, Green: WGA, Red: Phalloidin)

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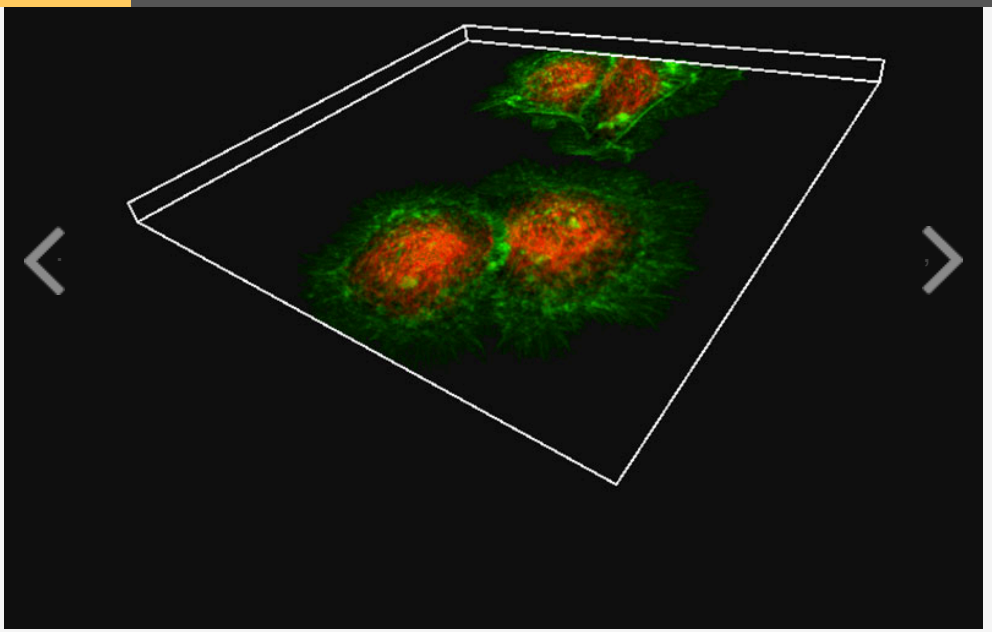

Precise 3D Imaging

The pinhole geometry of the Yokogawa spinning disk produces excellent image contrast at greater depths for imaging into thicker samples. Additionally, the IXplore Spin system combines high numerical aperture silicone oil objectives with ergonomic spherical aberration correction collar adjustment to provide excellent light gathering and dimensional fidelity. These elements make the IXplore Spin system the right choice for researchers who need to image living cells at high resolution without sacrificing speed, accuracy, or image quality.

*Image: HeLa cells (Green: Actin, Red: Tubulin)[*1]

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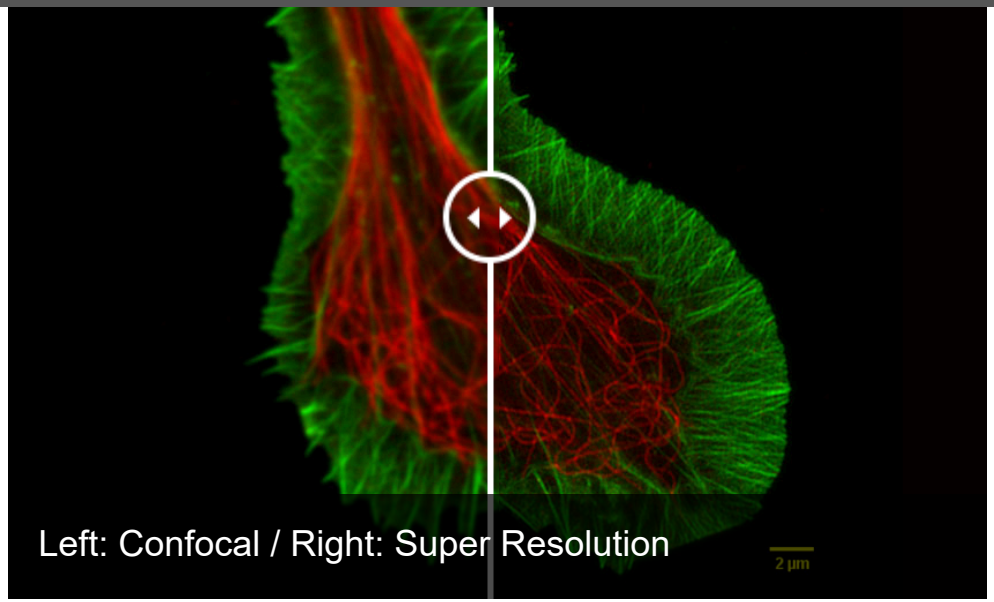
Upgrade to SpinSR

The IXplore microscope system is designed to meet your evolving research needs. The SpinSR super resolution module is available as an upgrade to any existing Olympus IXplore system and can be configured to fit your budget.

*Image: Fluorescent staining of microtubules (red: Alexa 594) and actin (green: Alexa 488 phalloidin) in growth cone of NG108 cells. Image courtesy of: Dr.Kaoru Katoh , Biomedical Research Institute, National Institute of Advanced Industrial Sciences and Technology (AIST)



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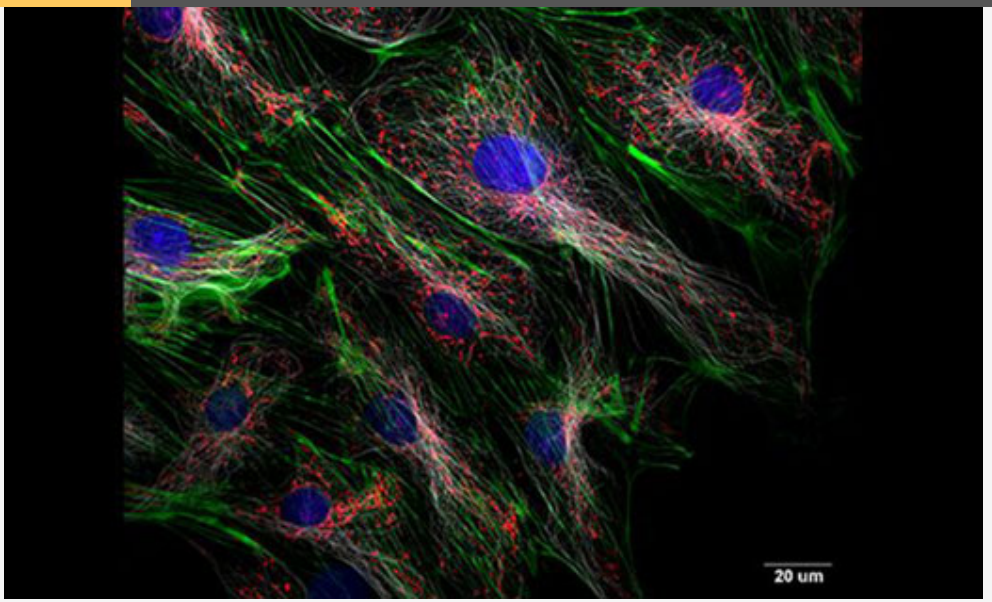

Imaging

The IXplore Spin laser combiner is scalable from two to six laser lines. A dual camera option is available to support simultaneous multichannel imaging when higher speed and a wider information bandwidth are required. Available excitation wavelengths include 405 nm, 445 nm, 488 nm, 514 nm, 561 nm, and 640 nm.

*Image: Rat-kangaroo Epithelial Kidney cells (Blue: Nuclear, Green: Actin, Red: Mitochondria, White: Tubulin)

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High Contrast under Bright Conditions

Designed for fluorescence observation, the Umbra light shield blocks out light pollution, even in bright rooms, enhancing fluorescence contrast and improving image clarity.

References

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*1 Although it became one of the most important cell lines in medical research, it's imperative that we recognize Henrietta Lacks' contribution to science happened without her consent. This injustice, while leading to key discoveries in immunology, infectious disease, and cancer, also raised important conversations about privacy, ethics, and consent in medicine.
To learn more about the life of Henrietta Lacks and her contribution to modern medicine, click here.
http://henriettalacksfoundation.org/

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