

## **Experience the Power of AI, Ji Workflow, and AX NSPARC for effortless super resolution imaging and advance analysis.**

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Are you searching for a user-friendly but powerful imaging system? Join our workshop to explore the Eclipse Ji microscope, a versatile system designed for high content screening and advanced research. Powered by AX confocal with the innovative spatial array confocal detector (NSPARC). The Ji delivers exceptional performance for a wide range of applications.

The Eclipse Ji leverages AI tools to automatically detect sample types, locate specimens, and optimize acquisition settings, significantly reducing user intervention and setup time. Integrated with NIS-Elements software, the system enables fully autonomous high-content screening (HCS) in widefield through the Smart Experiments module. Additionally, the no-code JOBS and General Analysis 3 (GA3) modules empower users to easily design and execute customs, automated workflows, offering exceptional flexibility for diverse research needs.

The Ji can be combined with AX's unparalleled large field of view, high speed, and in-depth acquisition for enhancing imaging capabilities. NSPARC further elevates confocal imaging by introducing a new level of ultra-low noise, highly sensitive spatial detection. Based on image scanning microscopy (ISM) technology, NSPARC equipped with an array detector delivers super-resolved (SR) with exceptional Signal-To-Noise ratio (SNR), enabling images equivalent to 0.2AU in resolution with SNR corresponding to 1AU. With superior resolution and SNR compared to traditional systems, NSPARC is ideal for high dynamic range, sensitive, or dim samples acquisition.

In this workshop, you will find out how to acquire confocal-based SR images with enhanced image quality using the Ji intuitive workflow. Experience real time improvement in both SNR and resolution and discover how NSPARC enables clear visualization of neuronal spines. Robust and rapid morphological analysis is made possible with integrated artificial intelligence, ensuring fast and reliable results.