Streamlined 3D Organoid Imaging with the Eclipse Ji and AX Confocal Platform

by Subash Chinnaraj & Frank van den Boom

Are you searching for a user-friendly yet powerful imaging solution? Join our workshop to discover the Eclipse Ji microscope, a versatile system designed for high-content screening and advanced research. Powered by AX confocal, the Ji delivers exceptional performance over a wide range of applications.

With integrated AI tools, the Eclipse Ji automatically detects sample types, locates specimens, and optimizes acquisition settings, minimizing setup time and user intervention. Its seamless integration with NIS-Elements software enables fully autonomous high-content screening (HCS) in widefield via the Smart Experiments module. The no-code JOBS and General Analysis 3 (GA3) modules further empower users to design and execute custom automated workflows, offering exceptional flexibility for diverse research needs.

The Ji platform, combined with AX's large field of view, rapid imaging, and deep acquisition capabilities, excels at imaging complex specimens such as organoids. These samples, often large and densely packed, present challenges for high-resolution imaging and optimal signal-to-noise ratio. The AX point scanner addresses these challenges with fast, gentle resonant scanning, delivering detailed 3D imaging with deep penetration and fine optical sectioning. Confocal acquisition for multiplex imaging and real-time analysis of organoids is easily automated using the Ji platform alongside JOBS and GA3 making it an ideal tool for feedback microscopy imaging.

Experience this smarter, streamlined workflow during our workshop, where we will demonstrate how the Ji platform and AX point scanner enable one-click detection and 3D imaging of multiple organoids.