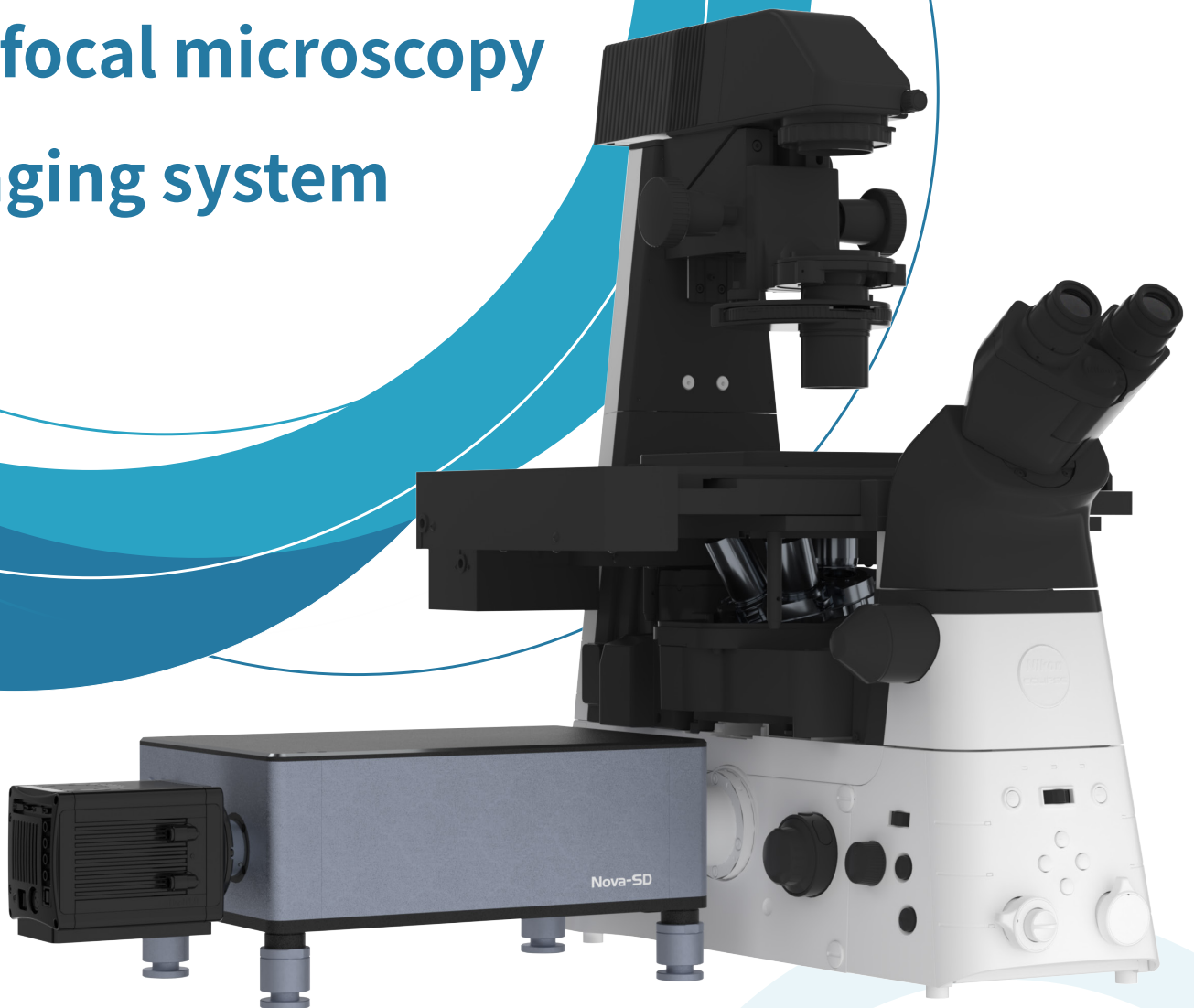


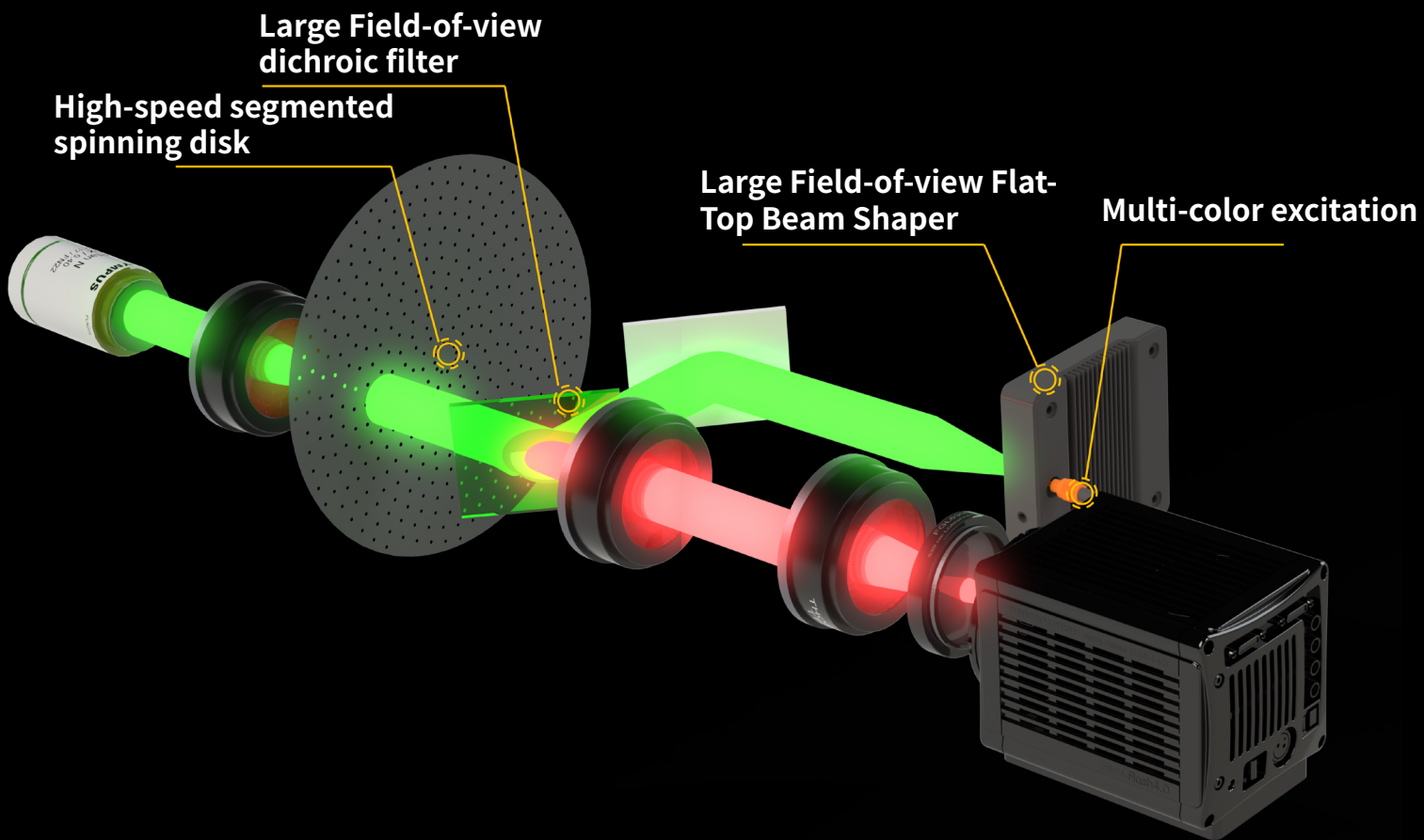
Nova-SD

Spinning-disk
confocal microscopy
imaging system



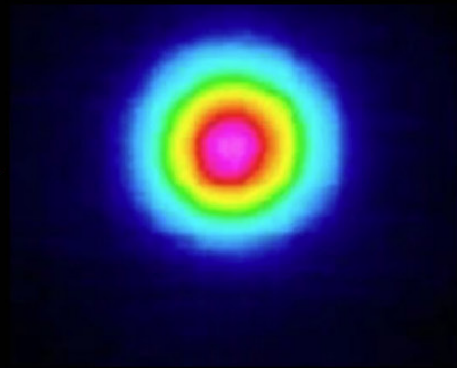
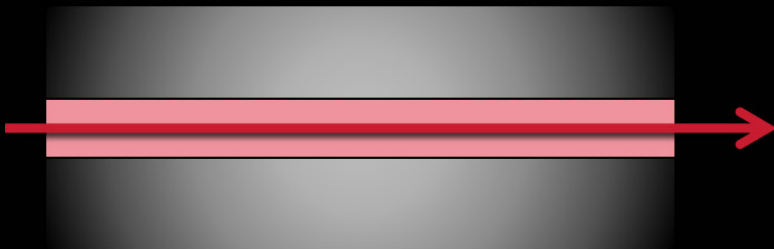
7 Colors **25** mm Field Number **230** nm Optical Resolution **2000** frames/sec

Light path diagram

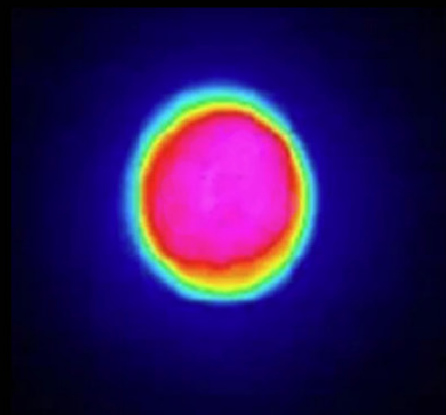
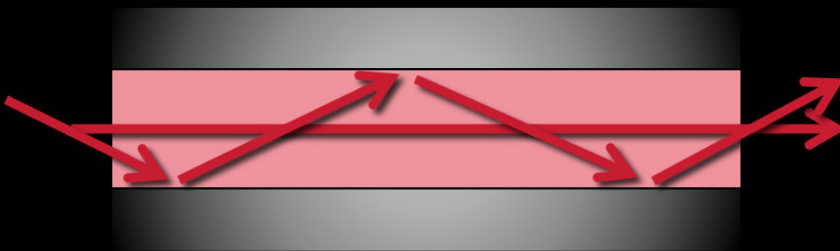


- **Multi-color**— Up to 7 colors to choose from
- **High-speed**— Single-layer spinning disk features with light-weight and higher rotational speed, providing a faster imaging experience
- **High-performance**— Easy to use, excellent performance, simple and user-friendly
- **High-productivity**— Time-saving and effortless, High cost-effectiveness and high productivity

Energy distribution of single-mode fiber

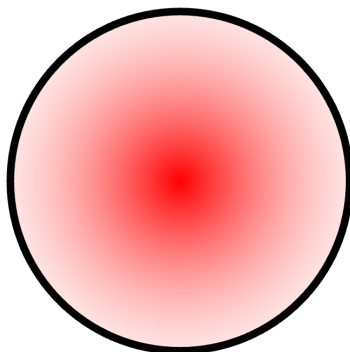


Energy distribution of Multi-mode fiber



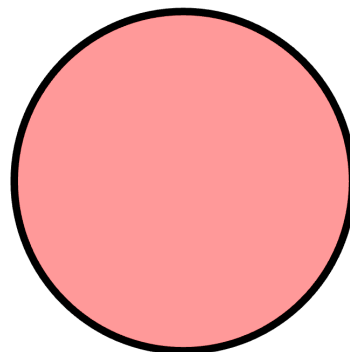
The rapid development of lasers has effectively solved the problem of illumination power. Multimode laser has a relatively high power, stable coupling system, and uniform illumination, making it the most suitable light source for spinning disk confocal microscope system.

Gaussian Illumination



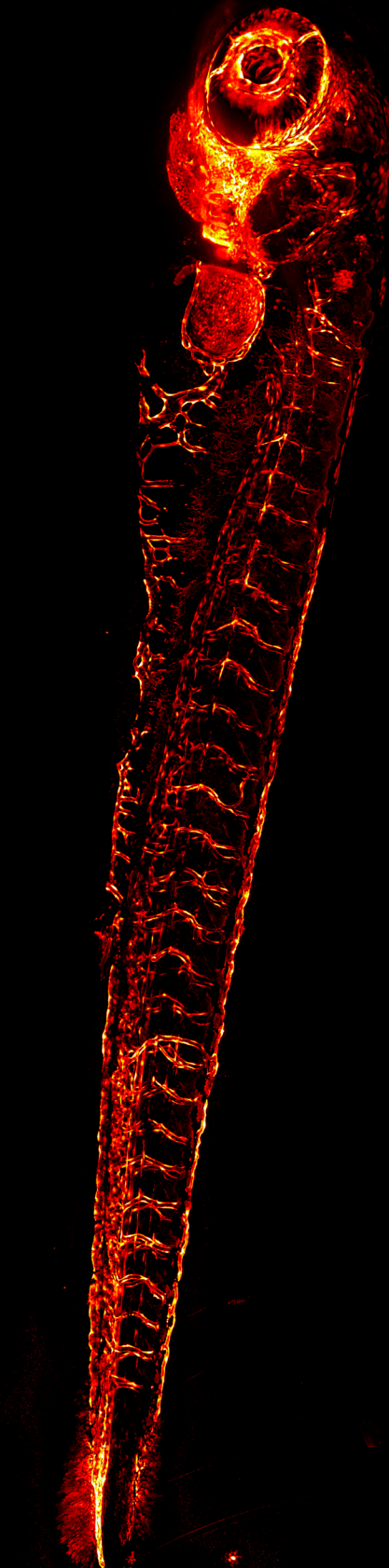
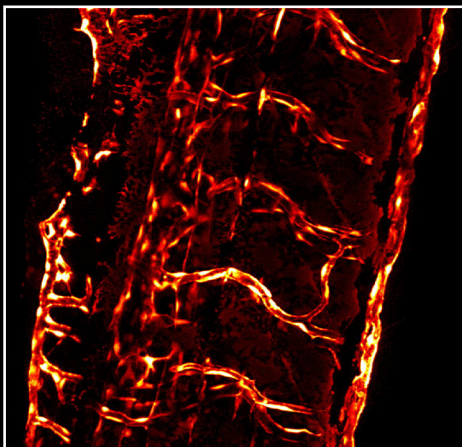
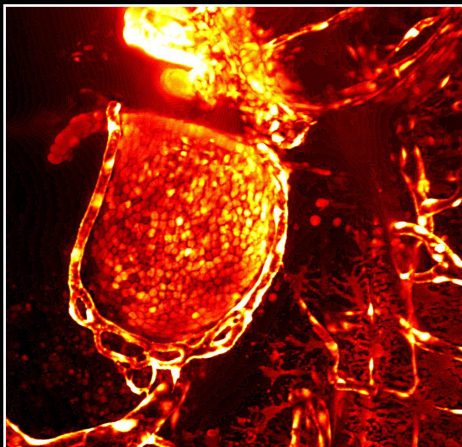
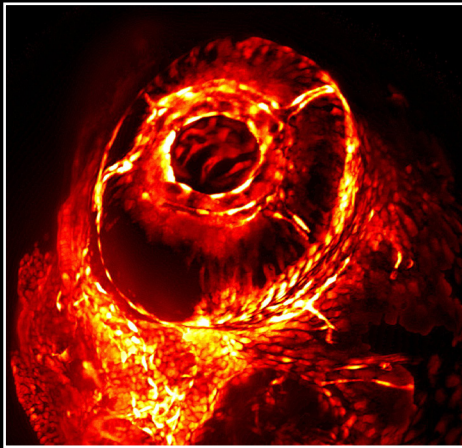
Traditional laser illumination not only has a small field-of-view, but also easily produces laser speckles, which affects the imaging quality.

Large Field-of-view uniform illumination



Multi-mode fiber+uniform illumination technology can achieve flat-top illumination without speckle, effectively improving the imaging quality.

Image stitching



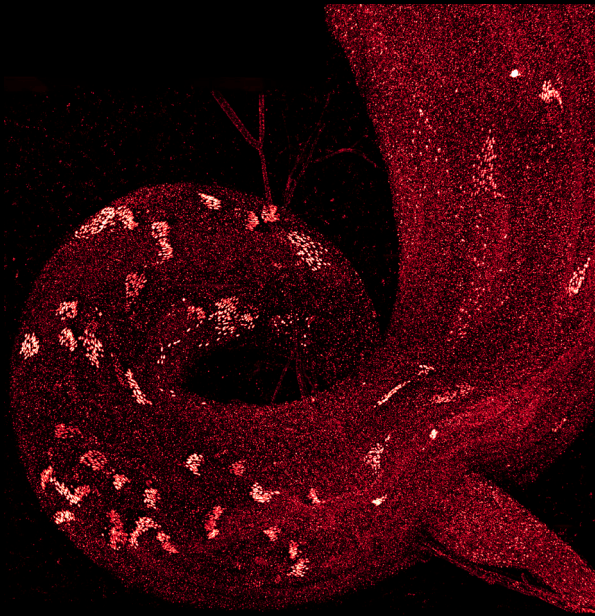
Zebrafish large field-of-view stitching

GFP labeled blood vessels

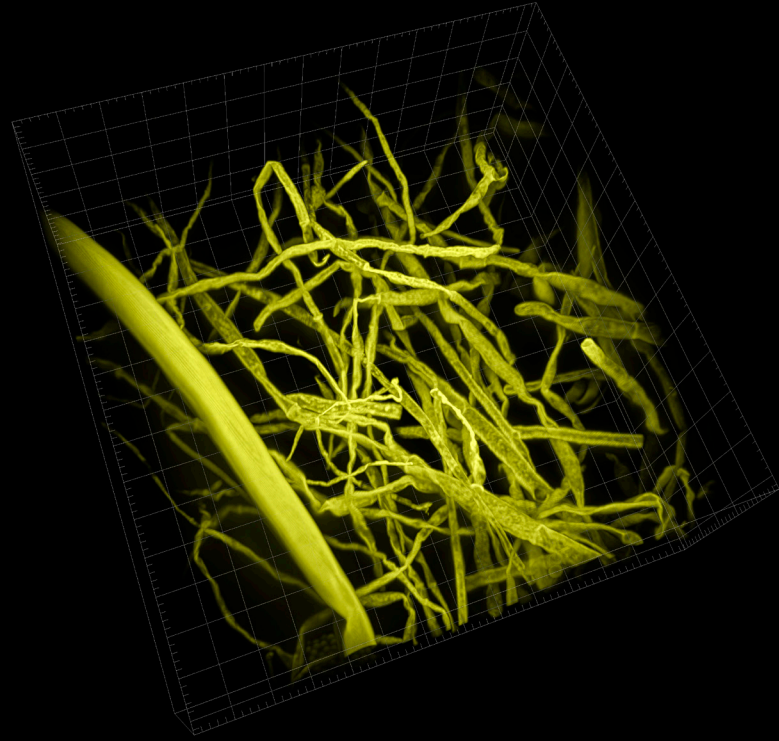
488 nm excitation

20X objective, 0.8NA

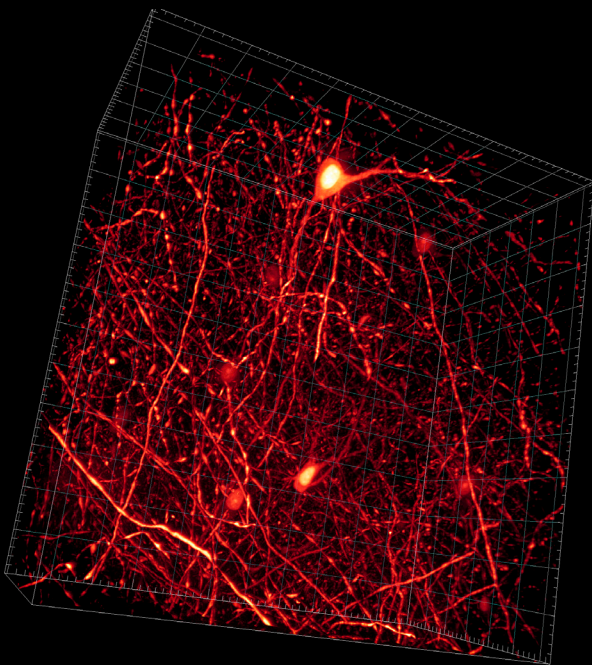
3D imaging



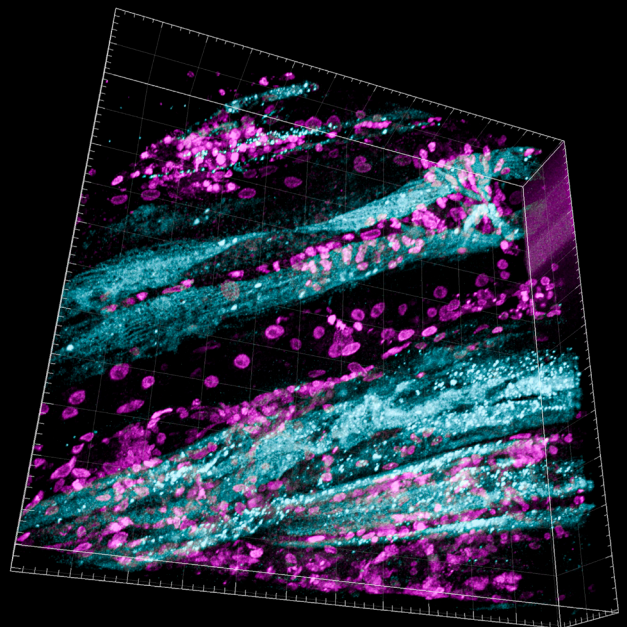
Fruit fly testis
488-Centrosome protein Ana1
60X objective, 1.49NA



Fungi
Auto-fluorescence
60X objective, 1.49NA

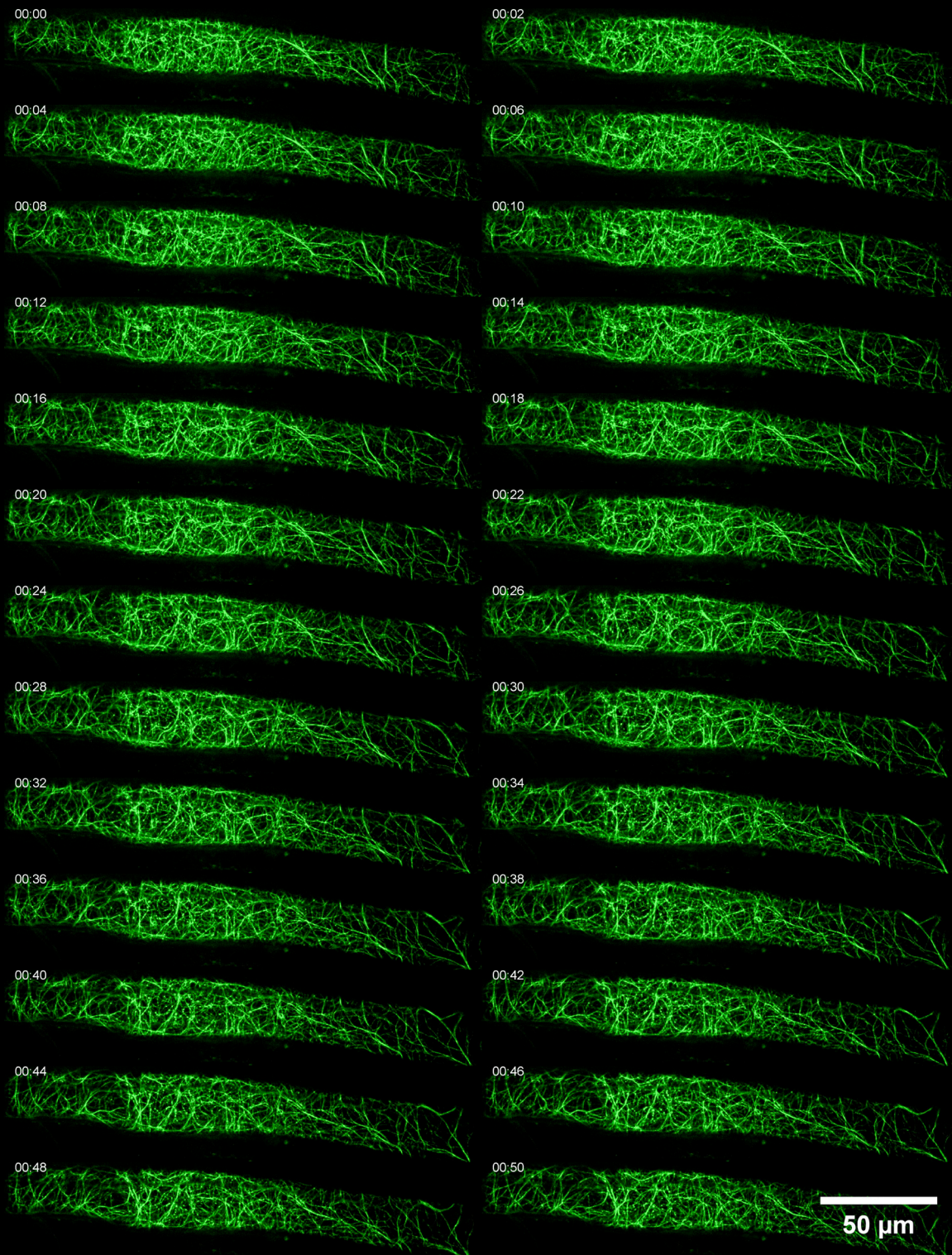


Tissue-clearing mouse brain
488nm excitation
60X objective, 1.49NA



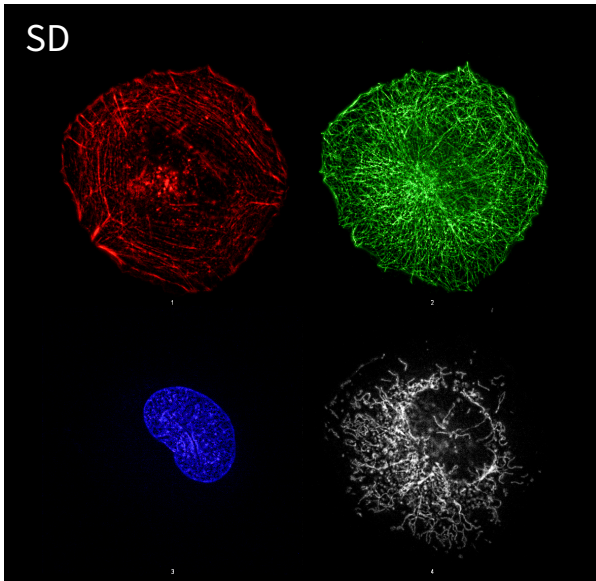
Nematode
488-nucleus 561-muscle group mitochondria
60X objective lens, 1.49NA

Dynamic imaging of live cells

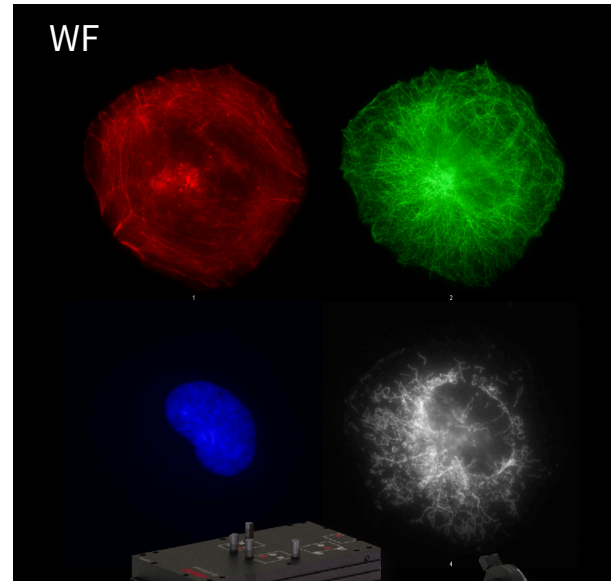


Arabidopsis microfilament, Z Max Intensity Projection, GFP labeling
Time interval of 1 second, 7-layer Z-stack, spacing of $0.3 \mu\text{m}$
488 nm excitation

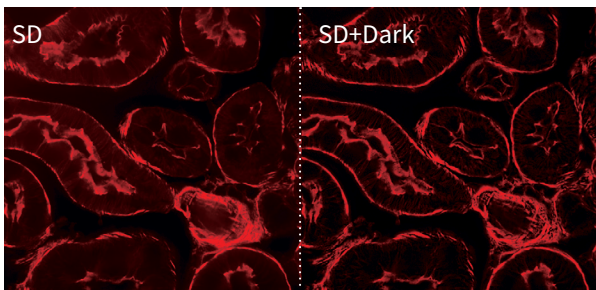
Simultaneous 4-color imaging



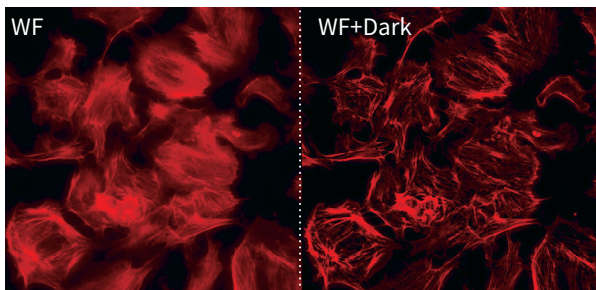
Imaging condition: 100X 1.49NA, with QuadImage™ image splitter for simultaneous imaging
Blue: cell nucleus; Green: microtubules; Red: Actin; White: Mitochondria



Algorithm

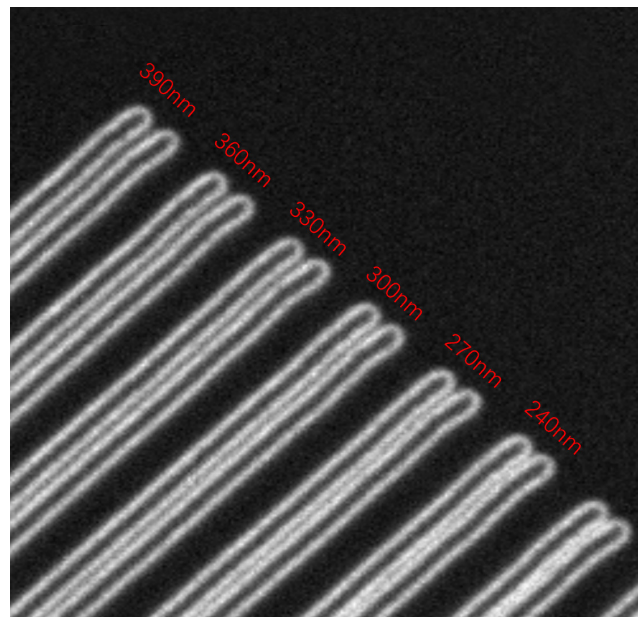


Mouse kidney slice, Alexa Fluor 488, Alexa Fluor 568, DAPI
Imaging conditions: 100 × 1.49NA, excitation wavelength 405/488/561 nm



Human osteosarcoma cells, actin, Alexa Fluor 568
Imaging conditions: 100X 1.49NA, excitation wavelength 561 nm

Argo-Light Resolution Target



Offer three options of
image optimization solutions

- Defocus Removal (Dark)
- Deconvolution (MLE/MRA)

技术规格

Imaging modes	Wide-field Confocal
Spatial resolution	Lateral ~230 nm 120 nm with deconvolution (100X, 1.49NA) Axial ~470 nm 300 nm with deconvolution (100X, 1.49NA)
Rotational speed/ imaging speed	7500 RPM 2000 fps
Field number	Up to 25 mm (Diagonal)
View uniformity	> 95%
Pinhole size/spacing	50/250 50/400 25/250 30/400 (Others can be customized)
Lasers	405 nm-1000 mW 450 nm-1000 mW 488 nm-1000 mW 520 nm-1000 mW 561 nm-800 mW 640 nm-1000 mW 750 nm-1000 mW More wavelengths can be customized
Microscope body	Nikon Ti2-E Olympus IX83 Leica DMI8
Camera	Tucson Dhyana95 V2 sCMOS Hamamatsu ORCA Flash 4.0 sCMOS (optional) Photometrics Prime BSI sCMOS (optional)

About Us

Airy Technologies Co., Ltd., founded in 2020 in Beijing, draws on the pioneering research of Professor Xi Peng's esteemed research group at Peking University. Our primary focus centers on advancing microscopic imaging technology through research and development. With a resolute commitment to excellence, we aspire to establish ourselves as an internationally influential provider of research-grade microscopy instruments and comprehensive system solutions within the realms of life sciences and medicine.

Our multidisciplinary team comprises accomplished engineers specializing in optics, algorithms, software, mechanics, electronics, and biology within the field of microscopic imaging. This diverse expertise empowers us to furnish robust, tailor-made technical support for your scientific research endeavors, characterized by swiftness, efficacy, and adaptability.

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