

# Imaging solutions

to answer your biological questions

Stunning images | Fast throughput | Powerful analysis

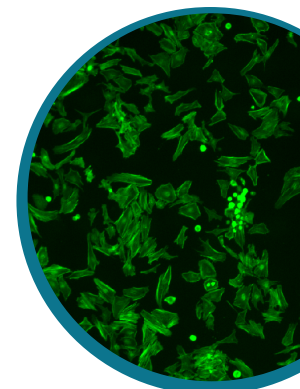
# Imaging systems



## SpectraMax® i3x Multi-Mode Microplate Reader with MiniMax imaging cytometer

Integrated multi-mode microplate reader and imaging system

- Ideal for cell counting, label-free imaging, and cell proliferation
- Western blot, imaging, and injectors on one configurable microplate reader
- Stain free, automated cell counting
- Preset plate reader and imaging protocol library
- Advanced curve fitting and statistical analysis

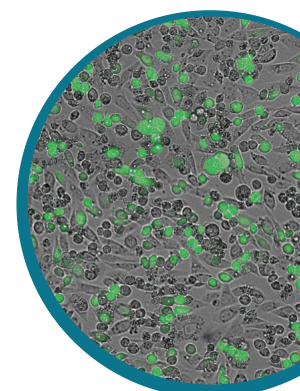


## ImageXpress Pico

Compact system that allows users to go from samples to results in minutes

- Ideal for cell counting, transfection efficiency, and cell health assays
- 25+ preconfigured application protocols
- 3D z-stack acquisition
- On-the-fly analysis
- Environmental control for live cell assays
- Access data from a browser—anytime, anywhere
- Optional Digital Confocal on-the-fly 2D deconvolution\*

\* ImageXpress Pico Digital Confocal uses AutoQuant 2D Real-Time Deconvolution



## Key features



High quality images



3D imaging and analysis



Environmental control



Fast throughput



Turnkey application protocols



Automation-compatible



Multiple imaging modes

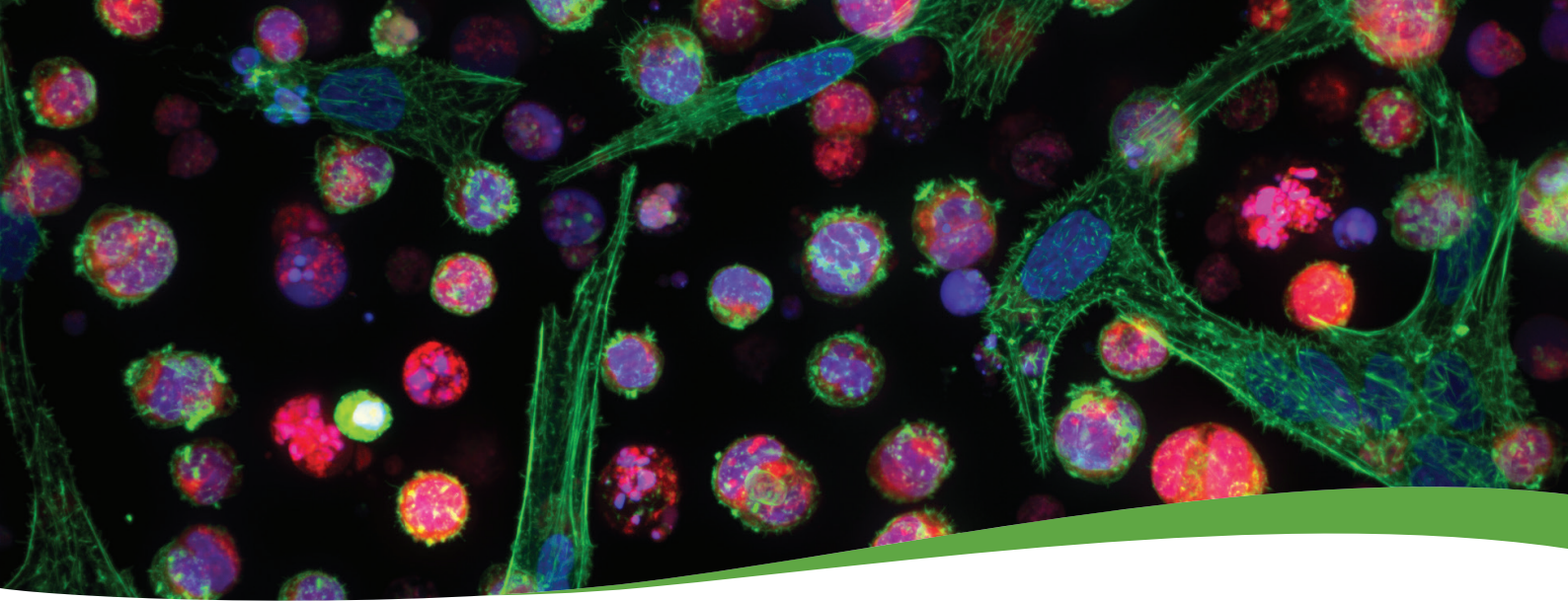


Ease of use



Water immersion imaging

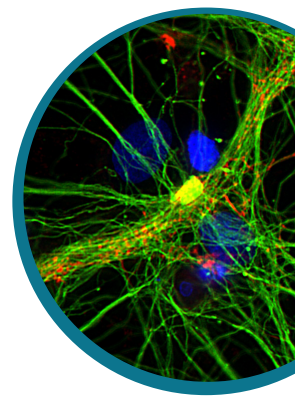




## ImageXpress Nano

**Fluorescence imaging, widefield platform for common biological assays**

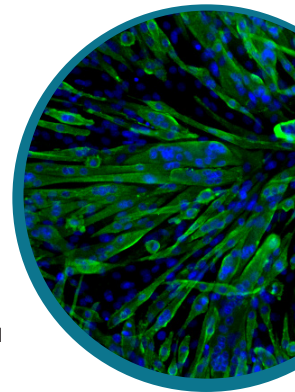
- Ideal for phagocytosis, mitotoxicity, autophagy, and cell differentiation
- CMOS 12 bit
- Better than 25 nm stage resolution
- 3D z-stack acquisition
- High speed image acquisition
- Real time kinetic environmental control



## ImageXpress Micro 4

**Configurable, high-throughput widefield imaging for fast biological processes**

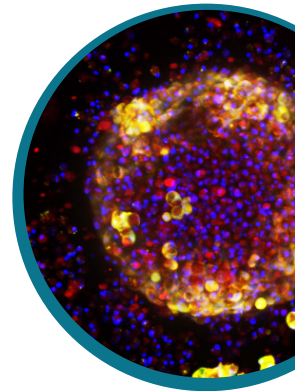
- Ideal for high-throughput screening, time-lapse imaging from calcium assays to multi-day subcellular assays, and intracellular yeast assays
- Greater than 3 log dynamic range
- Better than 25 nm stage resolution
- 3D volumetric analysis
- Upgradeable to confocal imaging
- Real-time kinetic environmental control



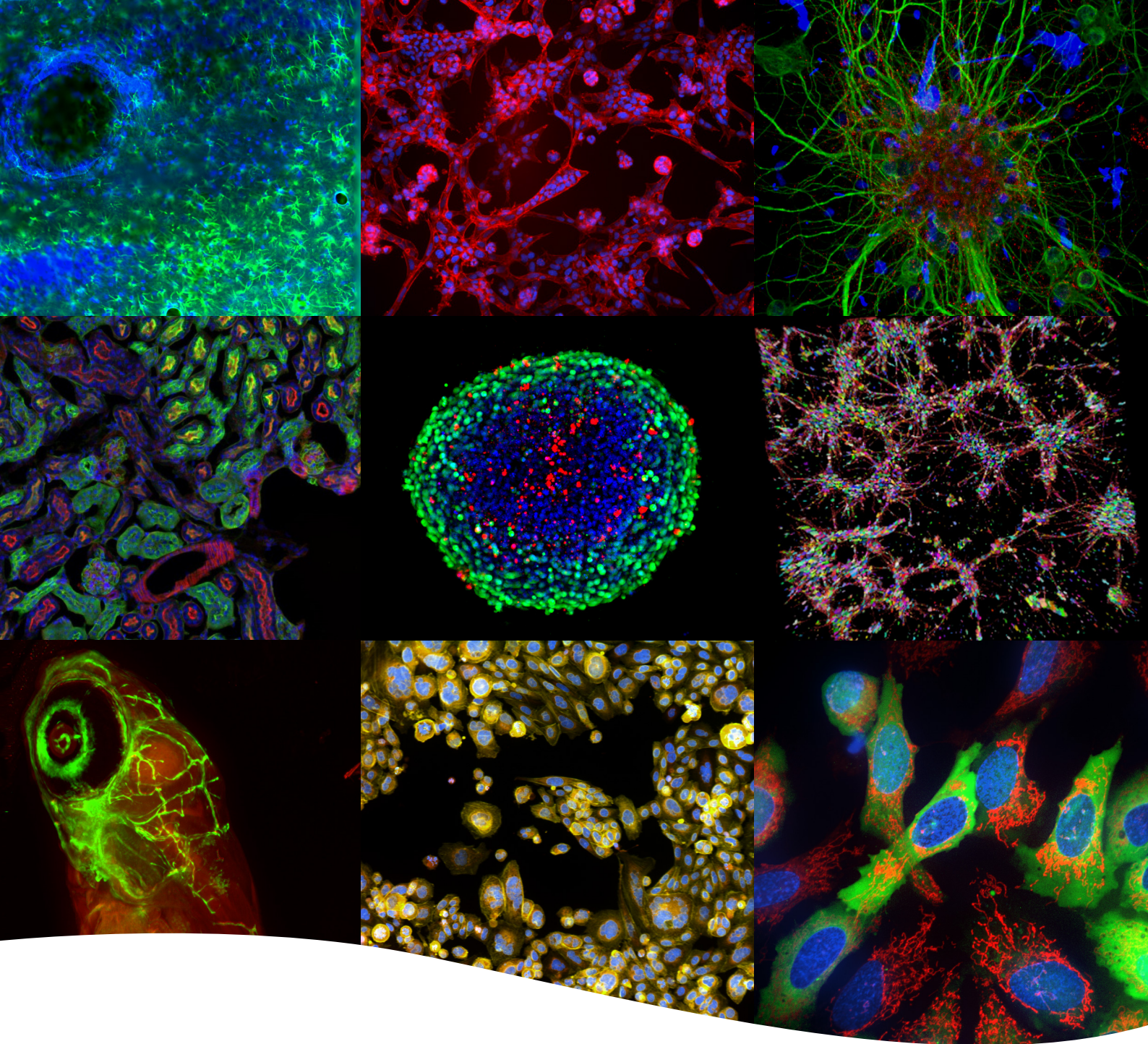
## ImageXpress Micro Confocal

**Combines speed, sensitivity, and resolution for confocal imaging**

- Ideal for 3D organoid and spheroid imaging
- Our most sensitive high-content imager
- Confocal imaging at the speed of widefield imaging
- Greater than 3 log dynamic range
- Better than 25 nm stage resolution
- 3D volumetric analysis
- Laser excitation available
- Water immersion objectives and laser excitation available







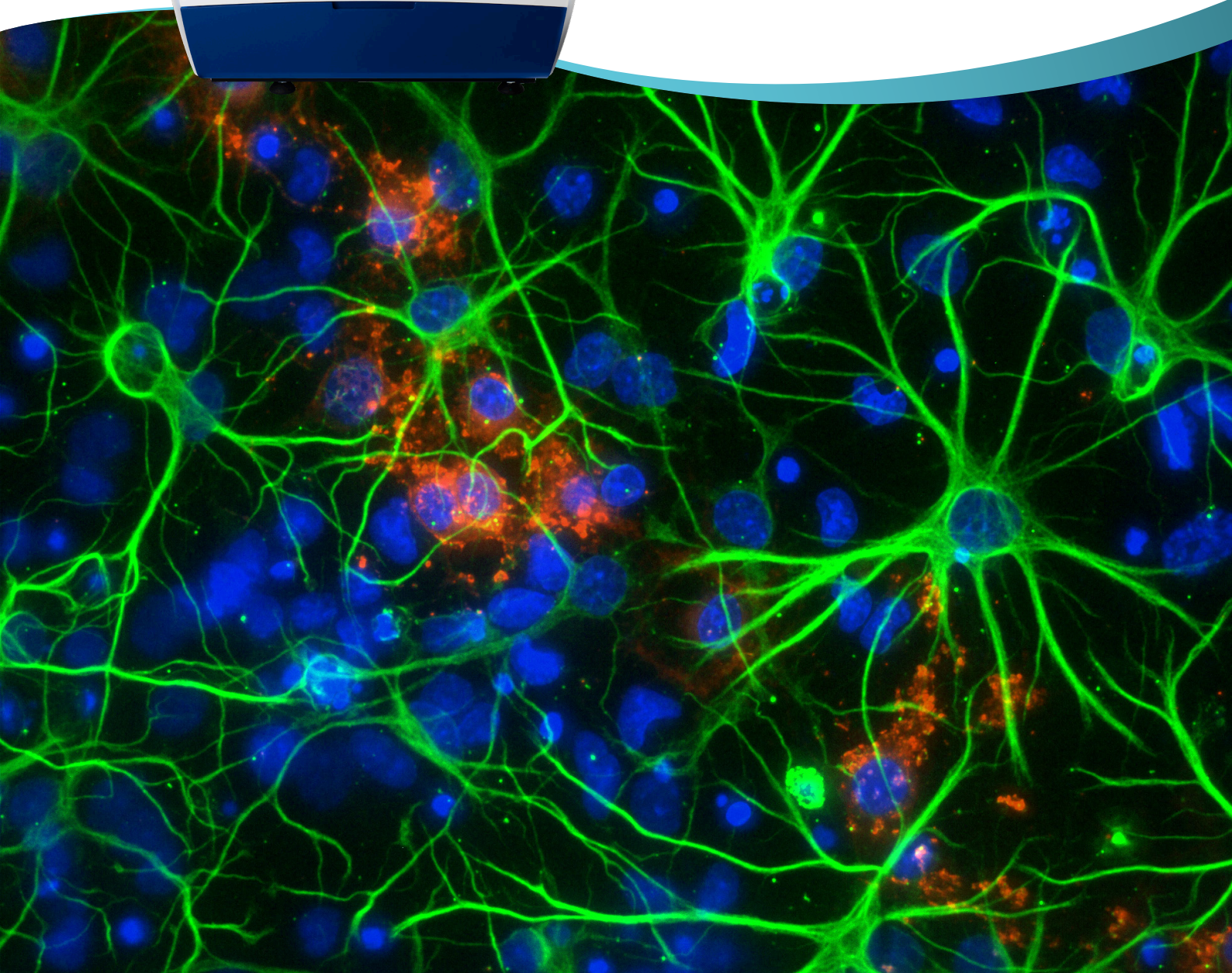
## Imaging applications

- Angiogenesis
- Apoptosis
- Autophagy
- Budding yeast screening
- Cell counting
- Cell cycle
- Cell migration and invasion
- Cell signaling
- Cell viability
- Co-culture assays
- Comet assay
- Colocalization
- Embryonic/induced pluripotent stem cells, cell differentiation
- Fatty acid uptake
- FMAT homogeneous assay
- Matrigel cell culture assays
- Membrane analysis
- Micronuclei and genotoxicity analysis
- Mitochondrial localization
- Mitosis
- Monopolar spindle detection
- Neurite outgrowth/process extension
- Organoids
- Pathway analysis and multiplexing
- Protein expression
- Protein movement
- Protein phosphorylation
- Kinase activation
- Quantifying cellular punctate staining
- Ratiometric intracellular  $[Ca^{2+}]$  measurements
- Receptor internalization
- Spheroids and colonies
- Stem cells
- Thick tissue slices
- Transfection efficiencies
- Wound healing
- Zebrafish assays

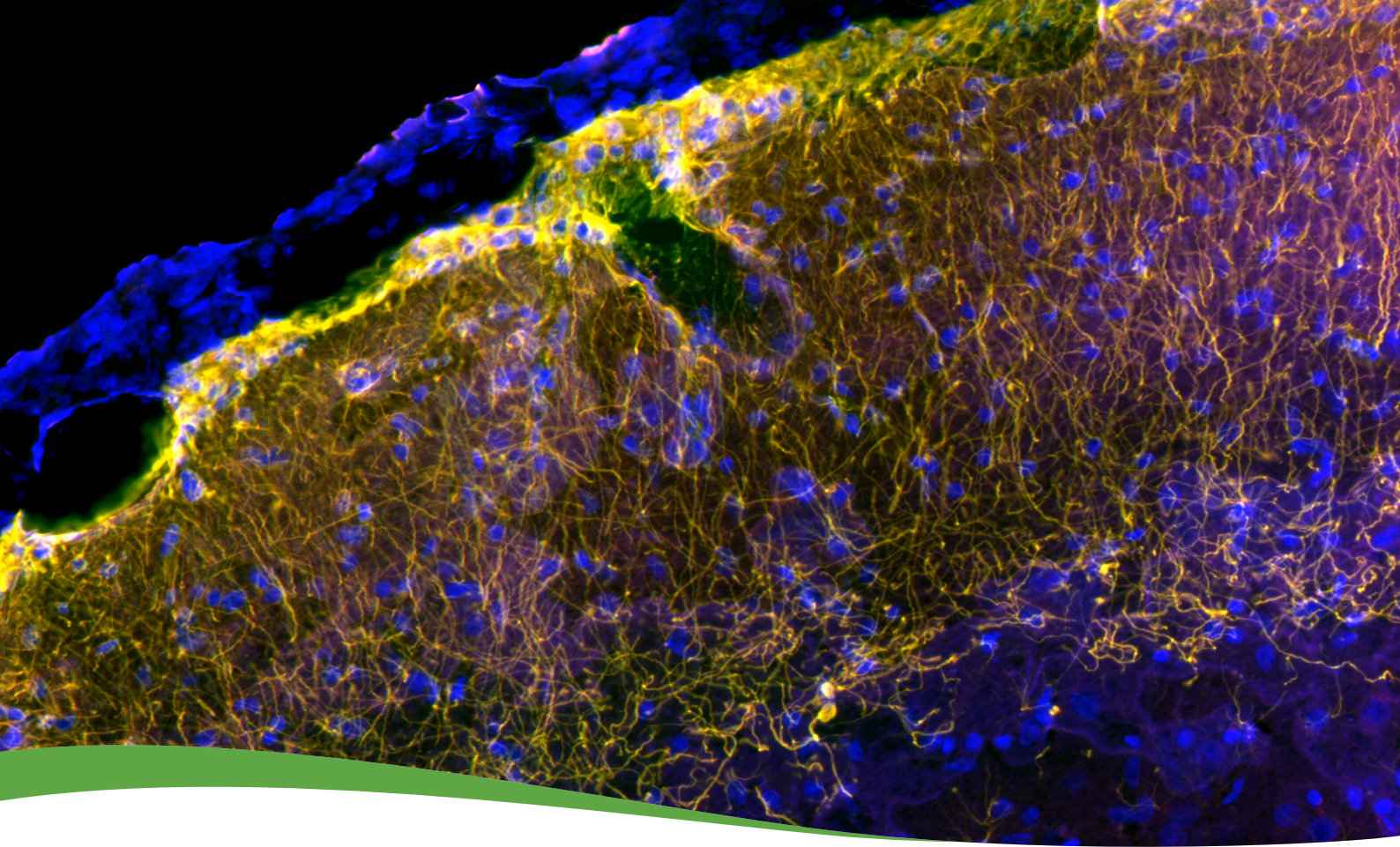


## Exceptional image acquisition at high speed

The ImageXpress Micro 4 and Nano systems are versatile instruments based on an inverted widefield microscope that comes standard in all models. The models are equipped with a large field-of-view camera and an on-demand solid state light engine, providing greater throughput.

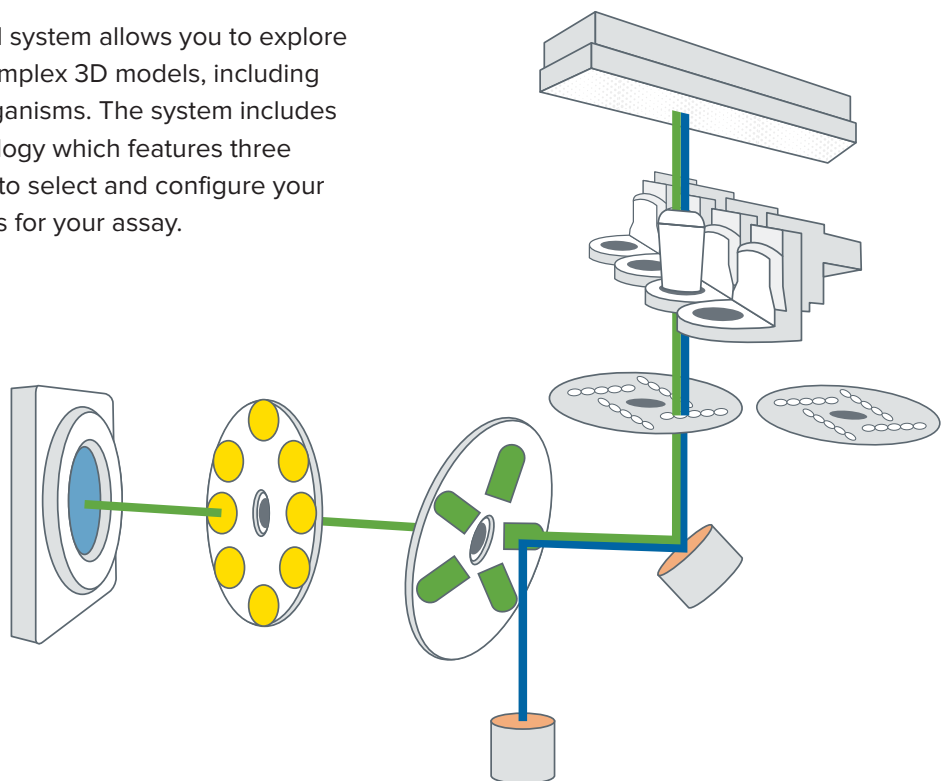




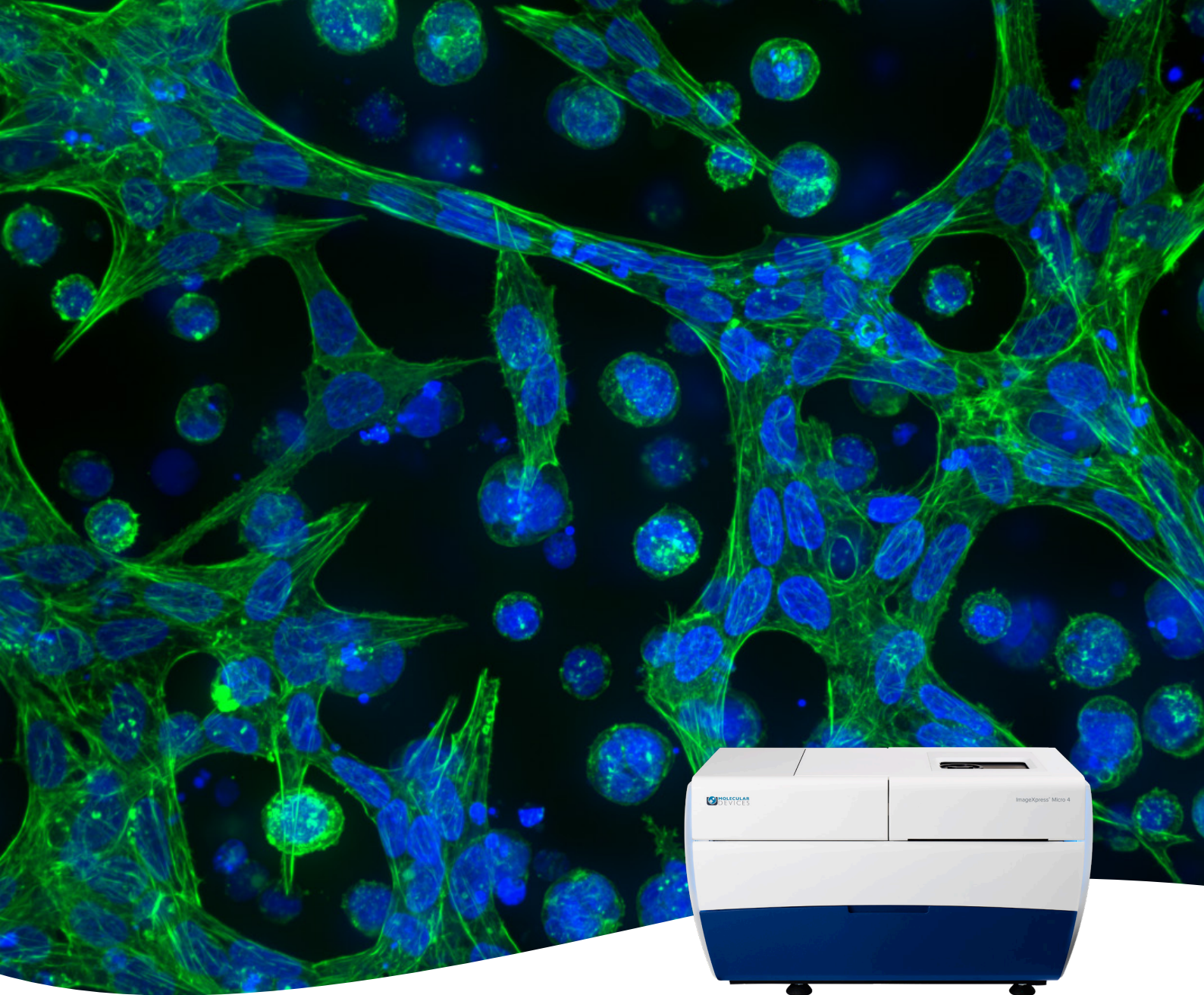


## Confocal capability improves image clarity and data quality

The ImageXpress Micro Confocal system allows you to explore more physiologically relevant, complex 3D models, including spheroids, tissues, and whole organisms. The system includes AgileOptix Spinning Disk Technology which features three optical options that make it easy to select and configure your system to ensure the best images for your assay.







Spinning disk geometry	60 $\mu\text{m}$ pinhole	50 $\mu\text{m}$ slit	42 $\mu\text{m}$ pinhole
High-sensitivity detection	•	•	•
Fast acquisition	•	•	•
>3 log dynamic range*	•	•	•
Widefield mode for flat biology	•	•	•
Most confocal applications	•	•	•
Highest resolution imaging			•
High throughput applications		•	

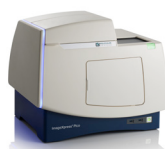
\*Powered by our highly responsive sCMOS sensor and advanced solid state light source.



# System specifications



**SpectraMax i3x Multi-Mode Microplate Reader with MiniMax imaging cytometer**



**ImageXpress Pico Automated Cell Imaging System**



**ImageXpress Nano Automated Imaging System**



**ImageXpress Micro 4 High-Content Imaging System**



**ImageXpress Micro Confocal High-Content Imaging System**

## Product features

Microplate types	6- to 1536-wells for plate reader, 96- and 384-wells for imaging	Up to 384 wells	Up to 1536 wells	Up to 1536 wells	Up to 1536 wells
Microscope slides	•	•	•	•	•
Number of fluorescent channels	2	4	5	5	5
Objective range	4X	4–63X	2–60X	1–100X	1–100X
AgileOptix Spinning Disk Technology				Upgradeable	•
Z-stack acquisition		•	•	•	•

## Optional features

Water immersion objectives					20X, 40X, & 60X
Confocal		Digital*	Digital*	Digital*	•
Environmental control for CO <sub>2</sub> , humidity and temperature control		•	•	•	•
Automated 3D analysis with volumetric output			•	•	•
On-board liquid handling				•	•
Dual injectors	•				
Brightfield transmitted light	•	•	•	•	•
Phase contrast				•	•

\*Digital Confocal uses AutoQuant 2D Real-Time Deconvolution

## High-performance customizations<sup>†</sup>

High-intensity laser light source			•	•	•
Deep tissue penetrating, confocal disk module			•	•	•

<sup>†</sup>For terms and conditions, visit [www.moleculardevices.com/ixmc#options](http://www.moleculardevices.com/ixmc#options)

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## Contact Us

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\*Austria, Belgium, Denmark, Finland, France, Germany, Ireland, Netherlands, Spain, Sweden and Switzerland