

# Imaging solutions to answer your biological questions

Stunning Images | Fast Throughput | Powerful Analysis

# Imaging systems

## Key Features



High quality images



Fast throughput



Multiple imaging modes



3D imaging and analysis



Turnkey application protocols



Ease of use



Environmental control

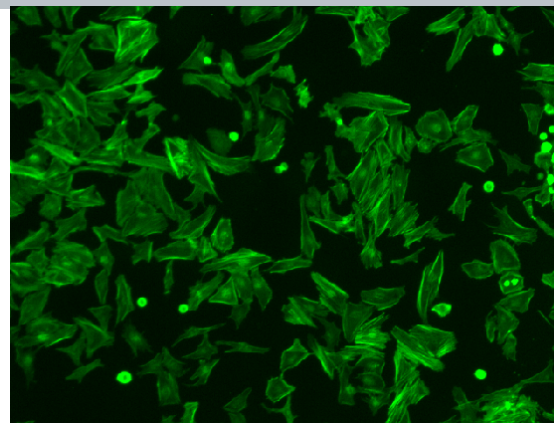


Automation-compatible



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

- 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

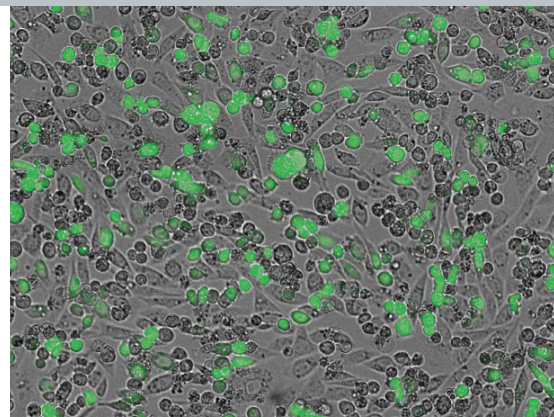


Integrated multi-mode microplate reader and imaging system



ImageXpress Pico

- Ideal for cell counting, transfection efficiency, and cell health assays
- 25+ preconfigured application protocols
- 3D z-stack acquisition
- On-the-fly analysis
- Tablet and touchscreen compatible
- Access data from a browser—anytime, anywhere

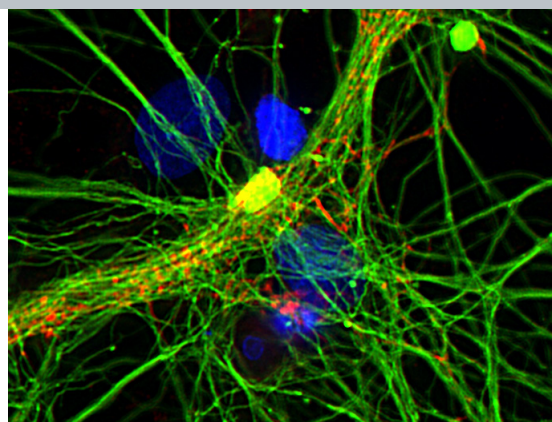


Compact system that allows users to go from samples to results in minutes



ImageXpress  
Nano

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

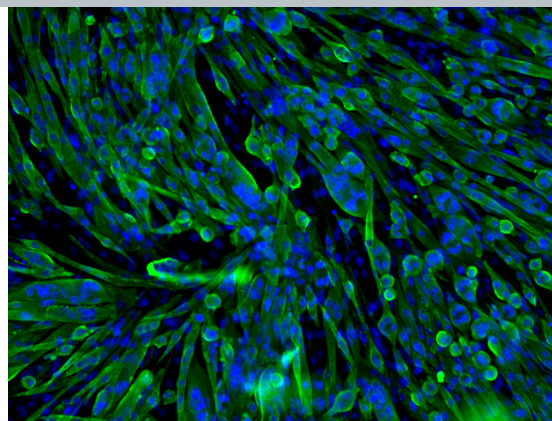


Fluorescence imaging, widefield platform for common biological assays



ImageXpress  
Micro 4

- 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
- 25 nm stage resolution
- 3D volumetric analysis
- Upgradeable to confocal imaging
- Real time kinetic environmental control

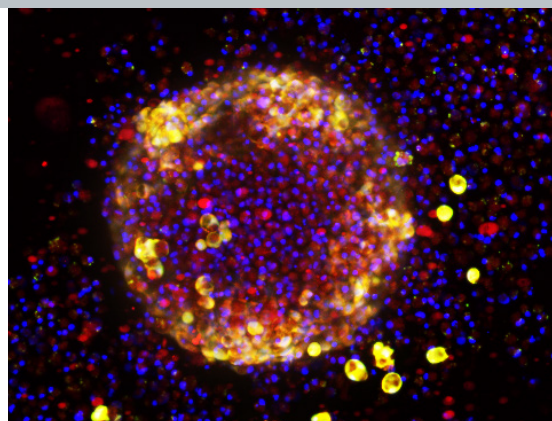


Configurable, high-throughput widefield imaging for fast biological processes



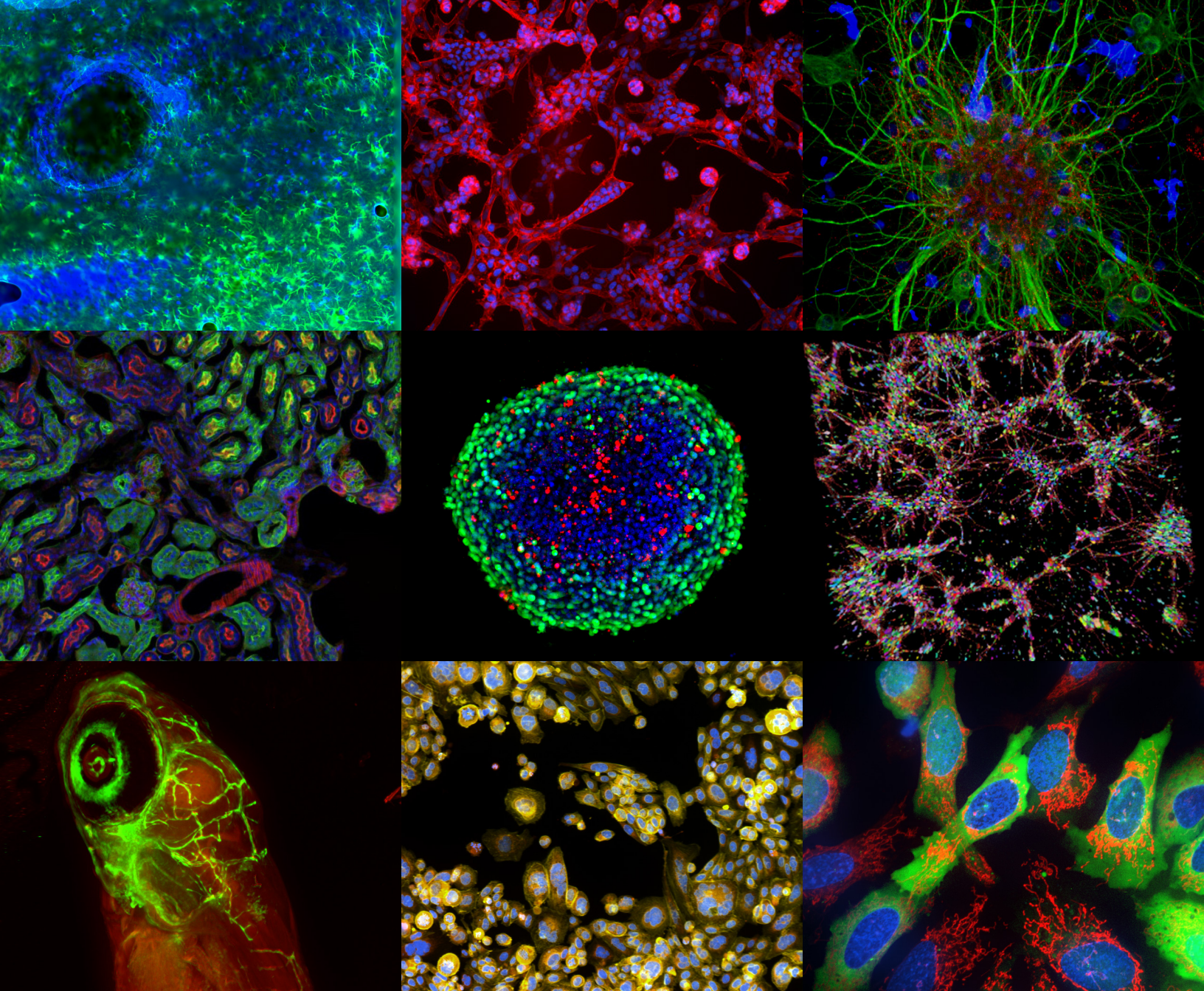
ImageXpress  
Micro Confocal

- 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
- 25 nm stage resolution
- 3D volumetric analysis
- Laser excitation available



Combines speed, sensitivity, and resolution for confocal imaging





## 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

Pathway analysis  
and multiplexing

Protein expression

Protein movement

Protein phosphorylation

Kinase activation

Quantifying cellular  
punctate staining

Ratiometric intracellular  
[Ca<sup>2+</sup>] measurements

Receptor internalization

Spheroids and colonies

Stem Cells

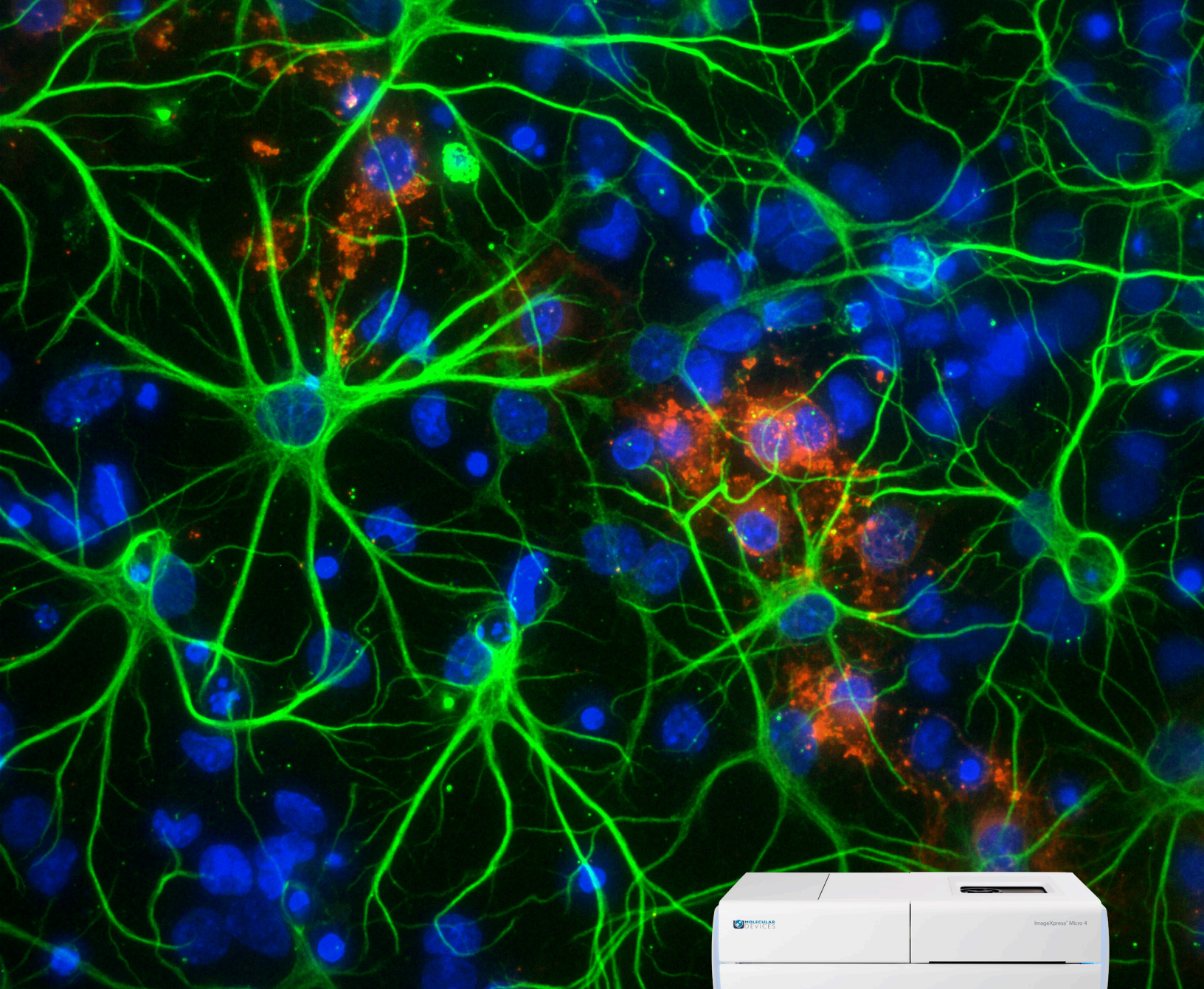
Thick tissue slices

Transfection efficiencies

Wound Healing

Zebrafish assays

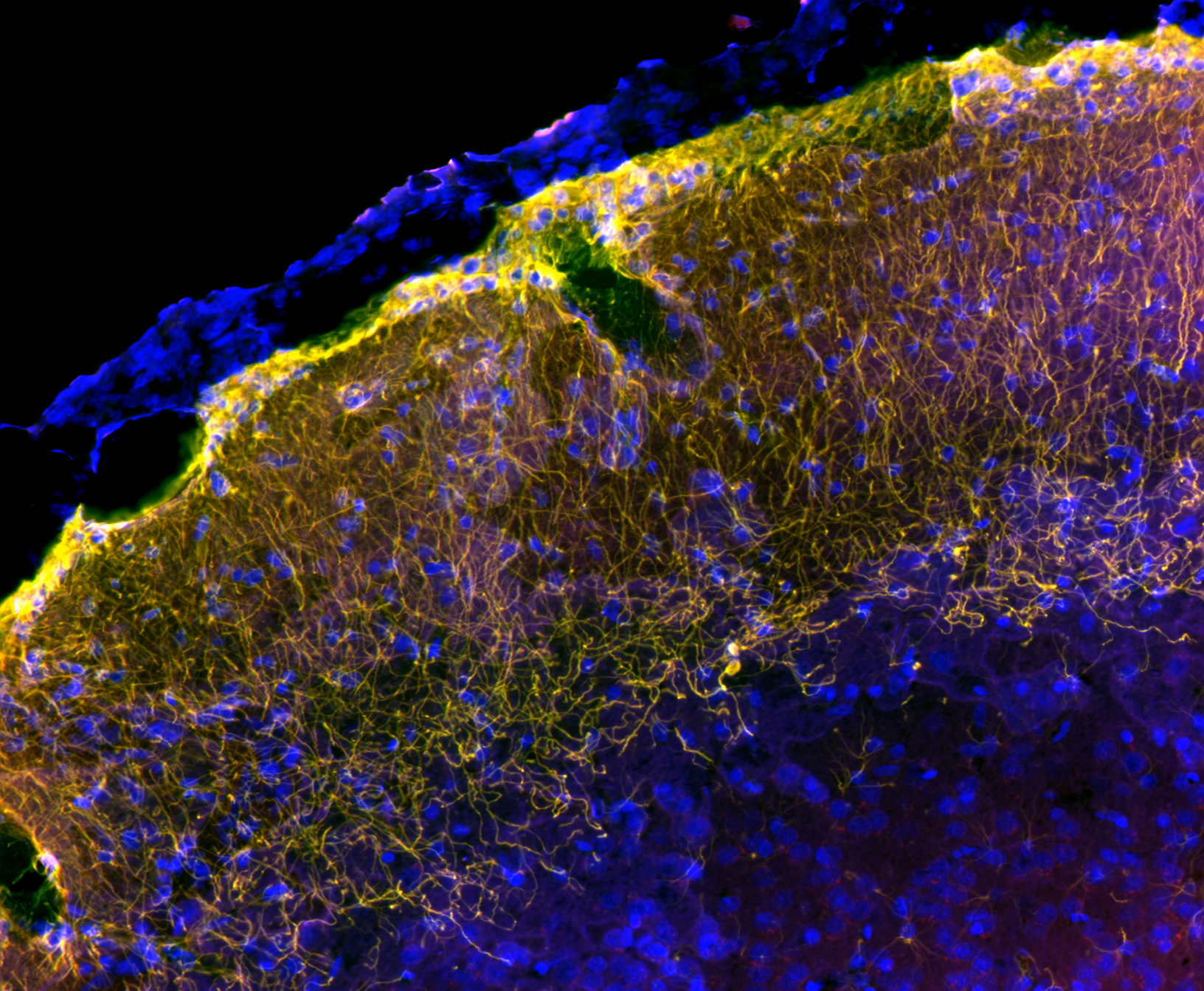




## Exceptional image acquisition at high speed

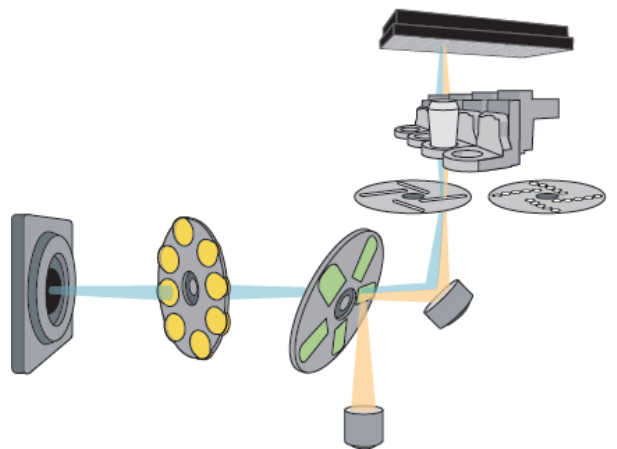
The ImageXpress Micro 4 and Nano systems are versatile instruments based on an inverted widefield microscope that comes standard in all models. The models are equipped with a large field of view camera and an on-demand solid state light engine, providing greater throughput.



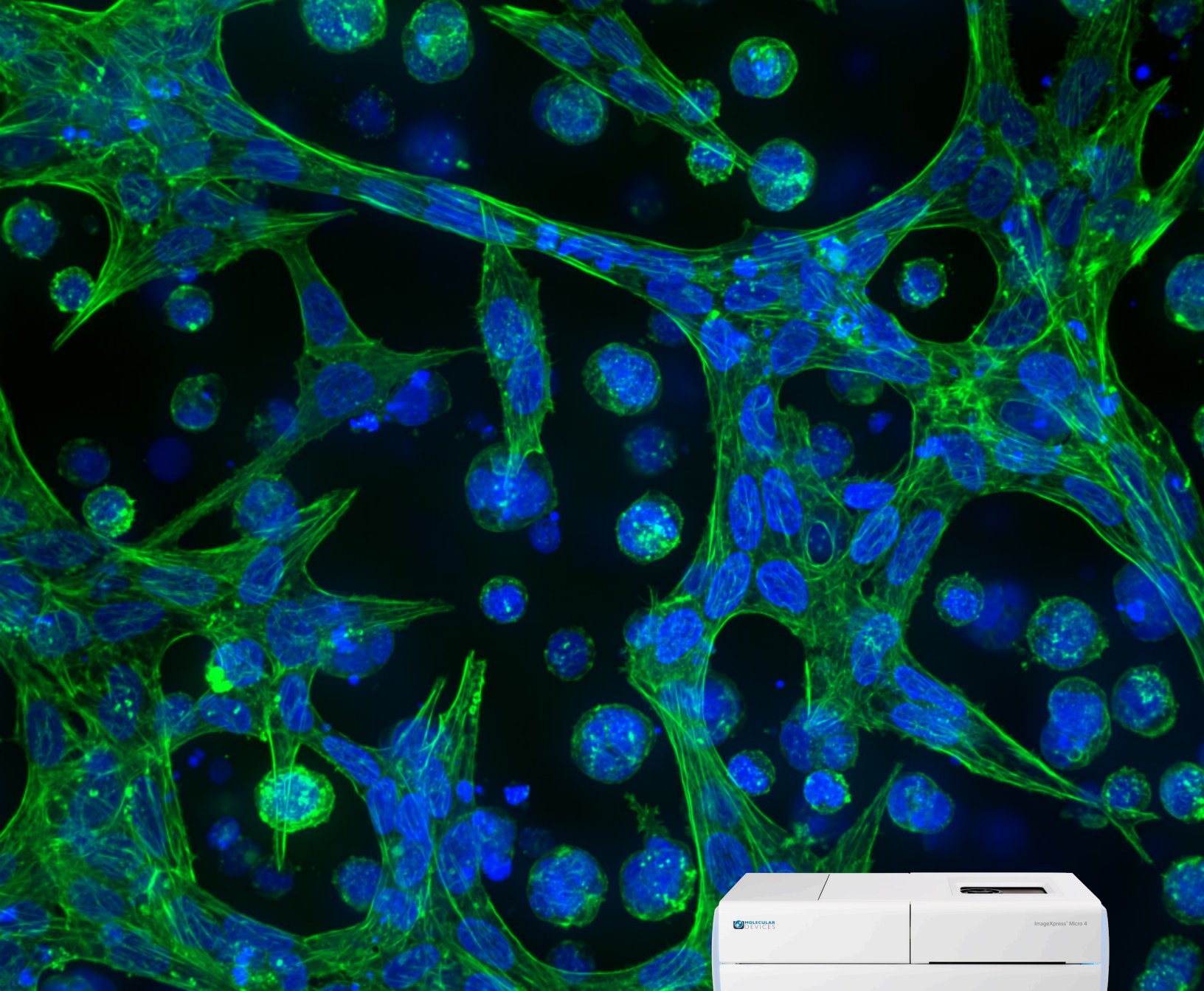


## Confocal capability improves image clarity and data quality

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 Disc Technology which features three optical options that make it easy to select and configure your system to ensure the best images for your assay.







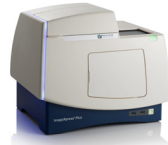
Spinning disc geometry			
60 $\mu\text{m}$ pinhole	50 $\mu\text{m}$ slit	42 $\mu\text{m}$ pinhole	
●	●	●	High-sensitivity detection
●	●	●	Fast acquisition
●	●	●	>3 log dynamic range*
●	●	●	Widefield mode for flat biology
●	●	●	Most confocal applications
		●	Highest resolution imaging
	●		High-throughput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



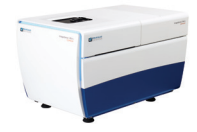
**ImageXpress Pico  
Automated Cell  
Imaging System**



**ImageXpress Nano  
Automated  
Imaging System**



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



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

<b>Assay Highlights</b>	Measures cell confluency	•	•	•	•	•
	Label-free imaging	•	•	•	•	•
<b>Product Features</b>	Time-lapse imaging		•	•	•	•
	Z-stack acquisition		•	•	•	•
<b>Optional Features</b>	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 Disc Technology				Upgradeable	•
	Tablet and touchscreen friendly		•			
	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				•	•

Contact your Molecular Devices Technical Sales Specialist and get the perfectly right imager for your lab.

## Contact Us

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 Email: [info@moldev.com](mailto:info@moldev.com)

Check our website for a current listing of worldwide distributors.

## Regional Offices

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United Kingdom <a href="tel:+441189448000">+44.118.944.8000</a>	China (Shanghai) <a href="tel:+862133721088">+86.21.3372.1088</a>	Japan (Tokyo) <a href="tel:+81363625260">+81.3.6362.5260</a>
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\*Austria, Belgium, Denmark, Finland, France, Germany, Ireland, Netherlands, Spain, Sweden and Switzerland