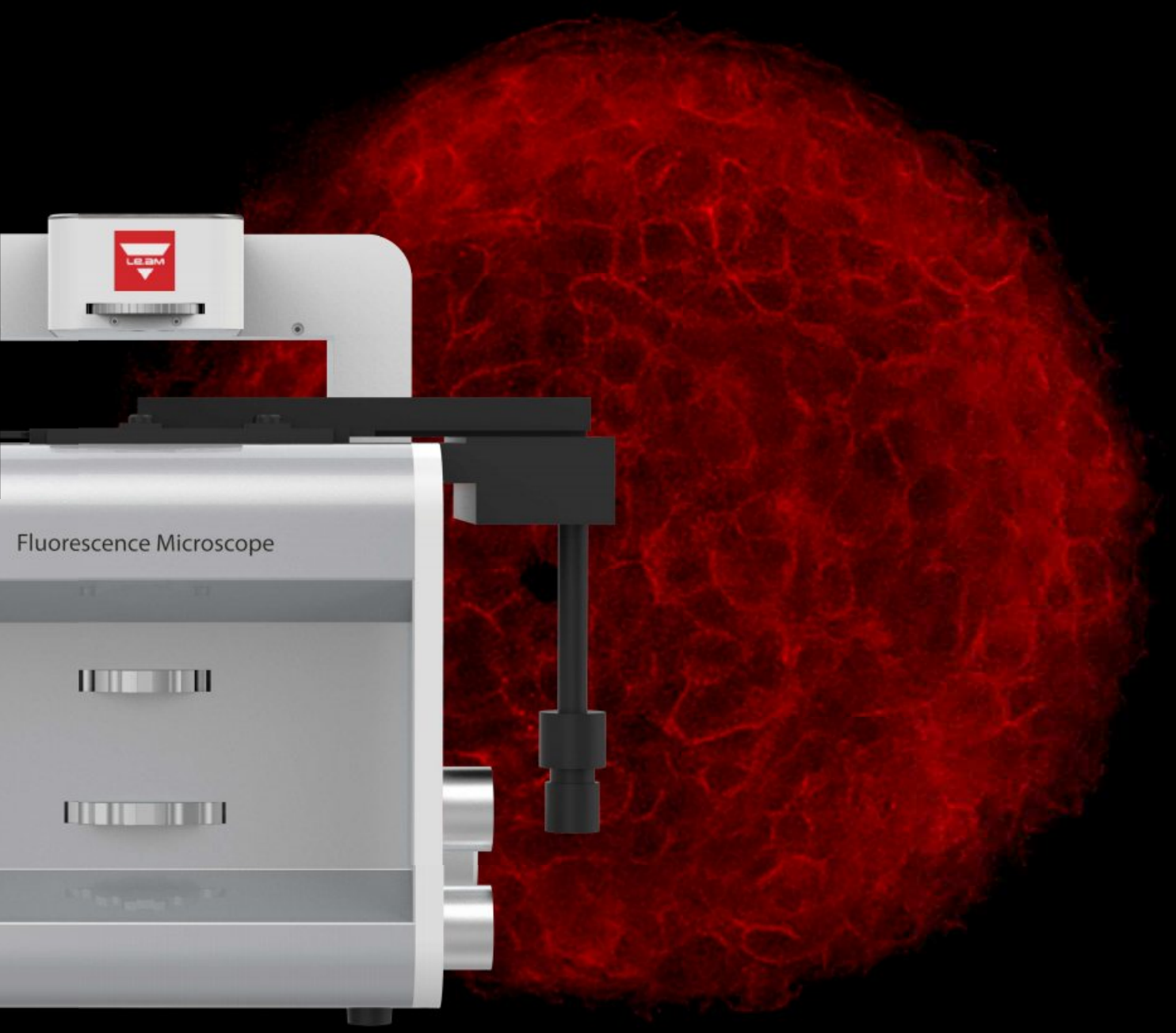
Red

Strong Fluorescence Imager

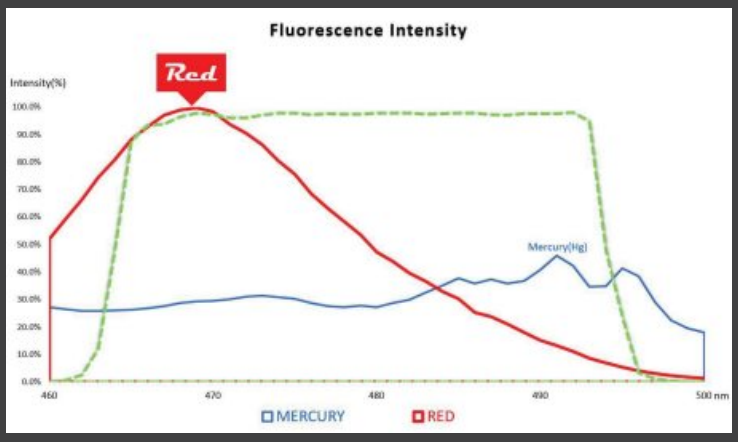


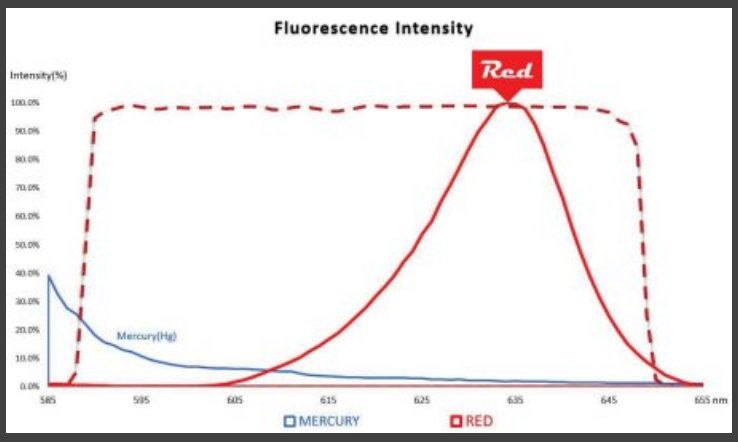
Red

Strong Intensity
Strong Signal
Fluorescence

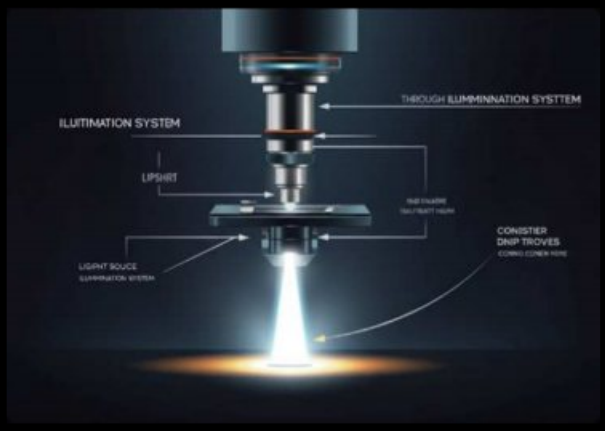
Strong Optical Illumination Path

Strong fluorescent signal from optimized illumination path.
Maximizes visualization of delicate biological samples.

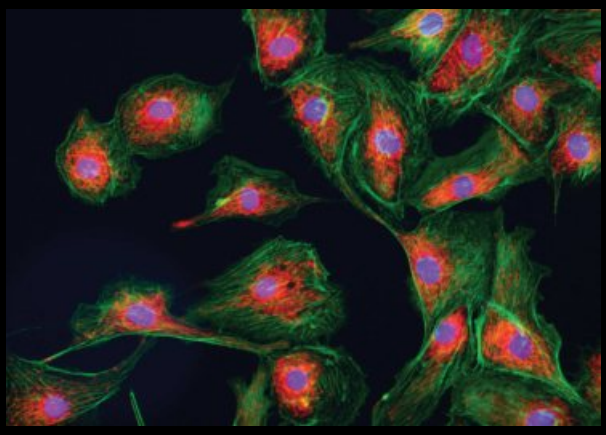




A strong optical illumination path results in strong intensity and produces a strong fluorescence signal



Fluorescence microscopy utilizes highly sensitive detectors to capture even the faintest of fluorescent signals, enabling the visualization of even the most subtle cellular features.

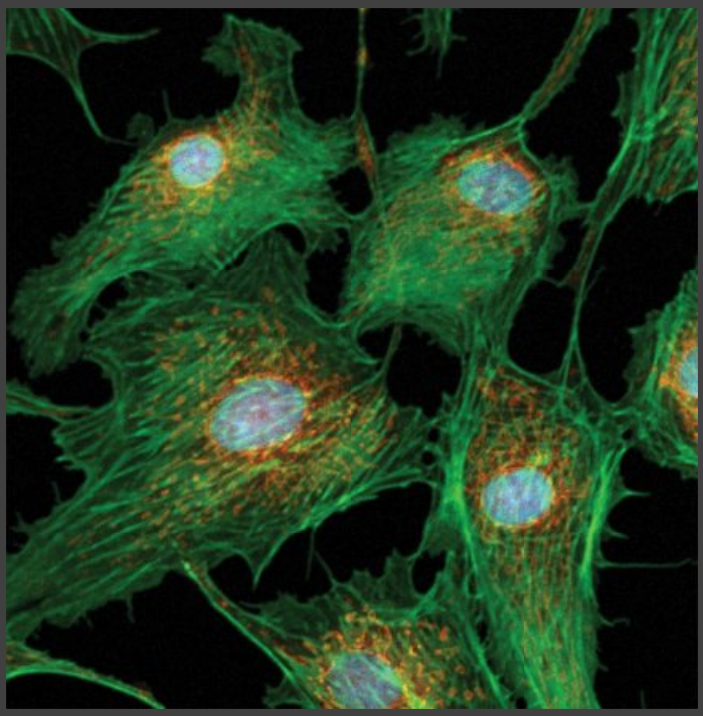


Strong Signals

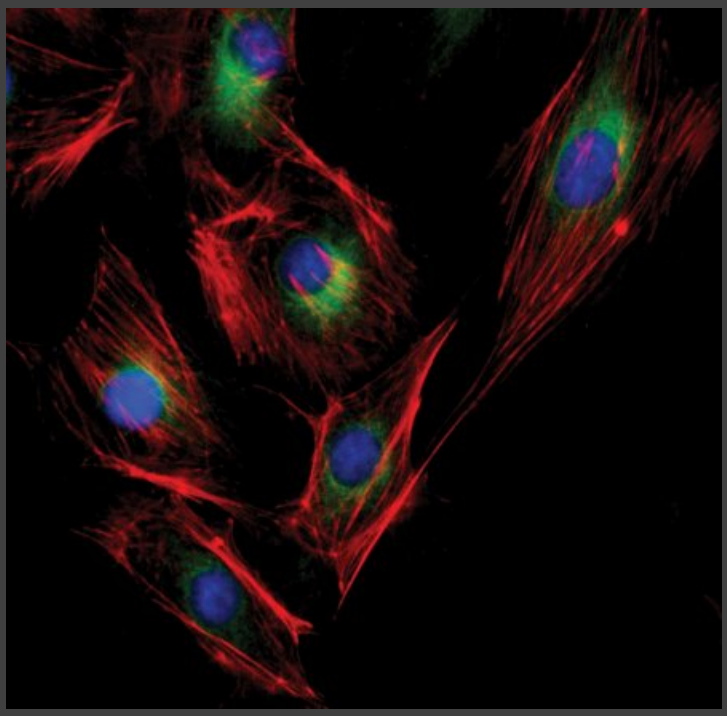
The use of fluorescent probes and markers provides a powerful amplificationof target signals, allowing for the clear identification and tracking of specific biomolecules and structures.

Sometimes, you don't need a confocal microscope

Confocal



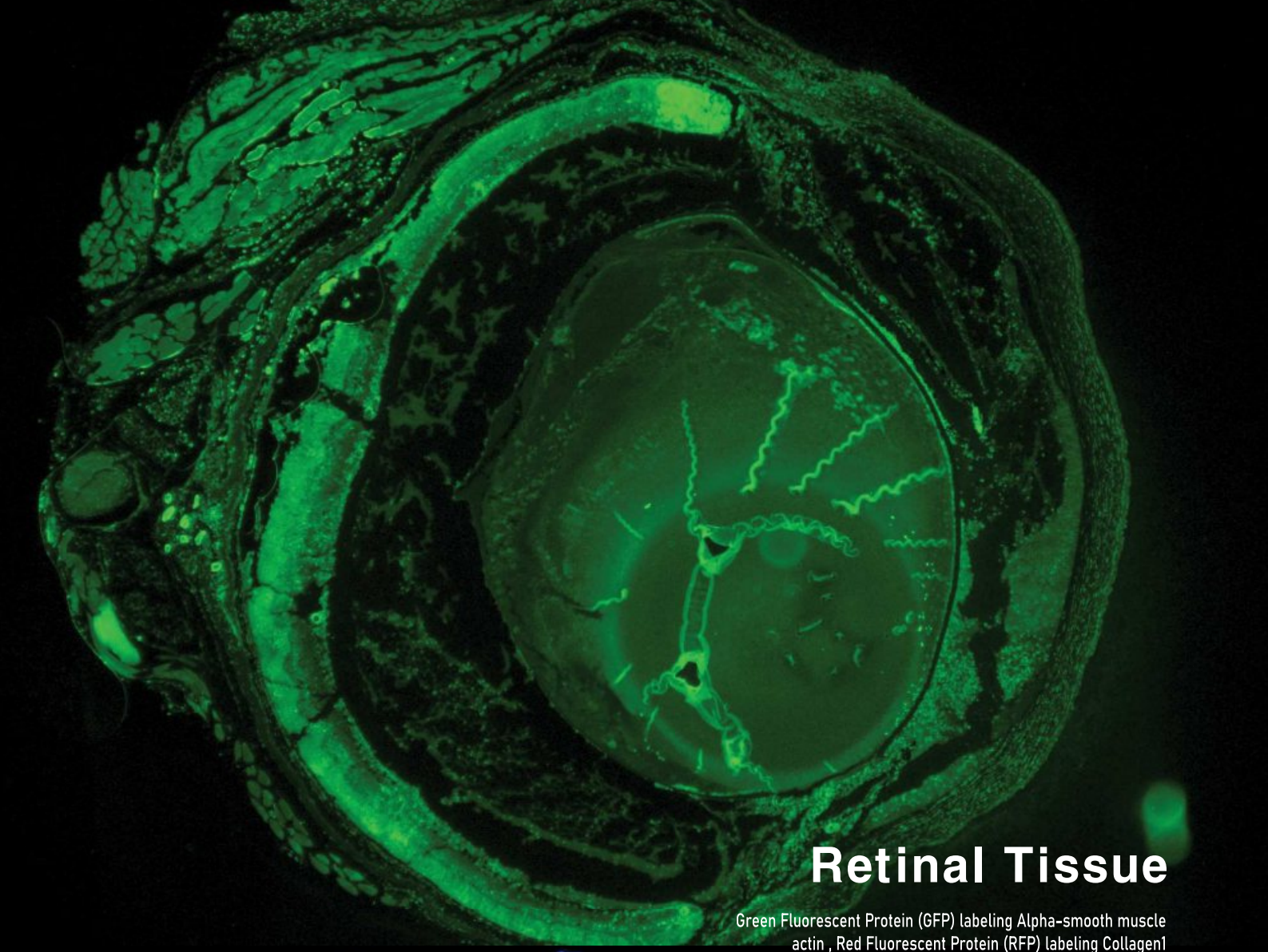
Red



- Confocal microscope : FluoCells™ Prepared Slide #1 (Mito Tracker™ Red CMXRos / Alexa Fluor™ 488 Phalloidin/DAPI)
- Red Fluorescence imager : FluoCells™ Prepared Slide #2 (Mouse Anti-α-tubulin/AlexaFluor™ 488 Texas Red™-X Phalloidin/DAPI)

Primary Mouse Neuron Imaging

Analyzing these fluorescent markers in primary neuron cultures helps elucidate the cellular mechanisms underlying neurodegenerative diseases like Parkinson's.

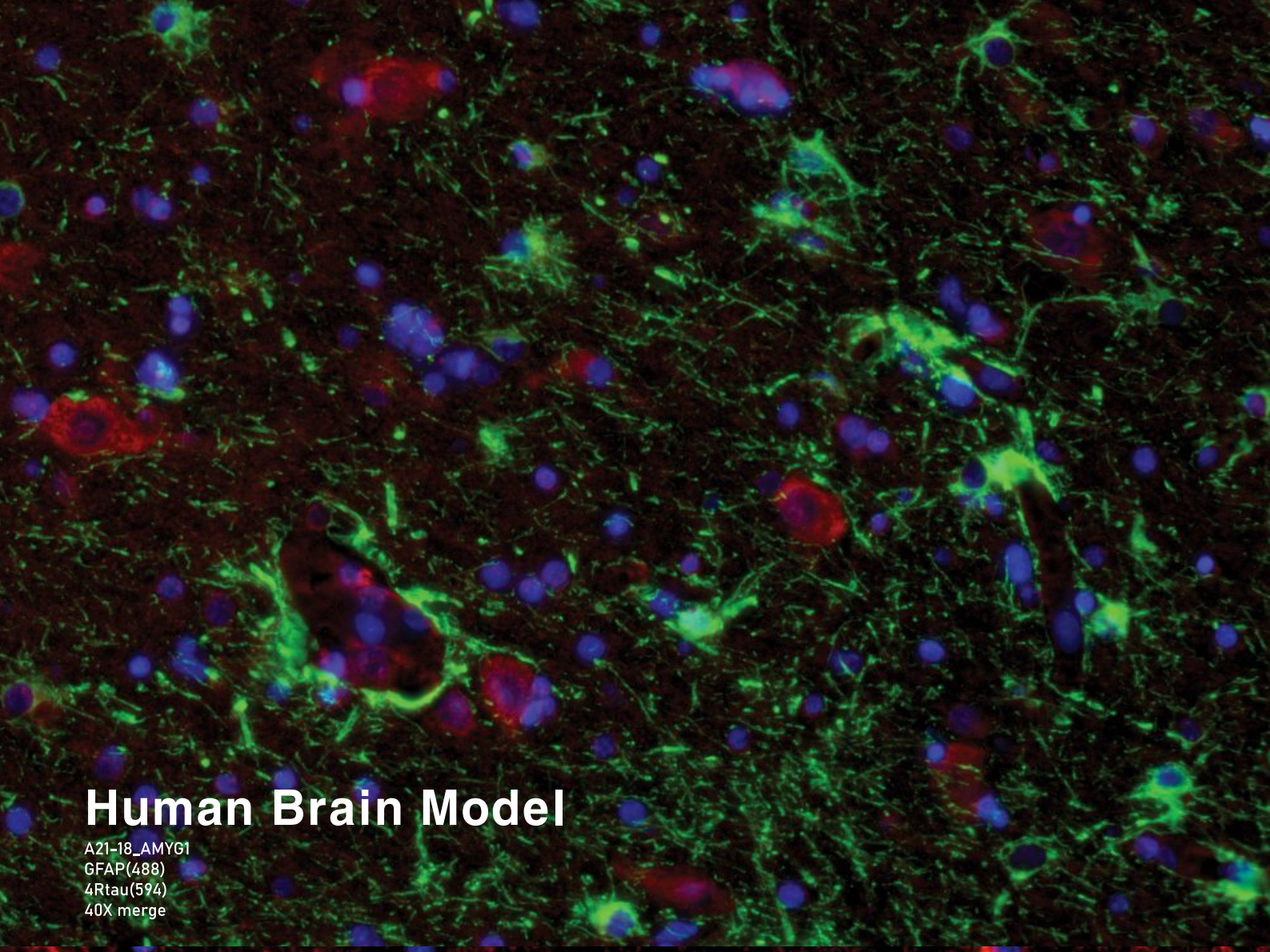


Retinal Tissue

Green Fluorescent Protein (GFP) labeling Alpha-smooth muscle actin , Red Fluorescent Protein (RFP) labeling Collagen1
4X objective for imaging Paraffin section of retina, 3µm thickness.

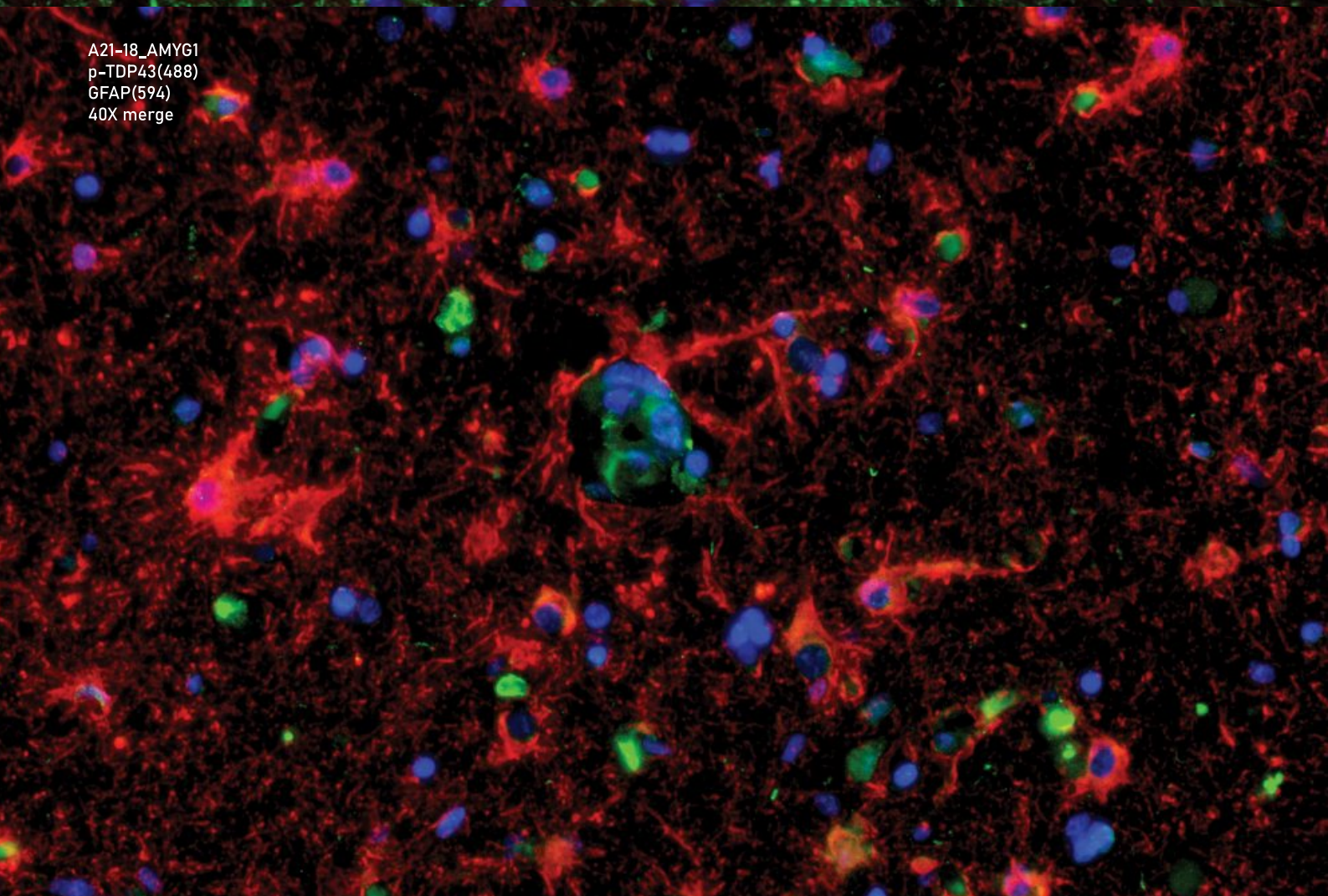
Olfactory Bulb

The olfactory bulb is a crucial structure in the brain that processes and transmits smell information. This DAPI-stained image, captured using a 10X objective, image stitching, showcases the intricate cellular organization of this region.

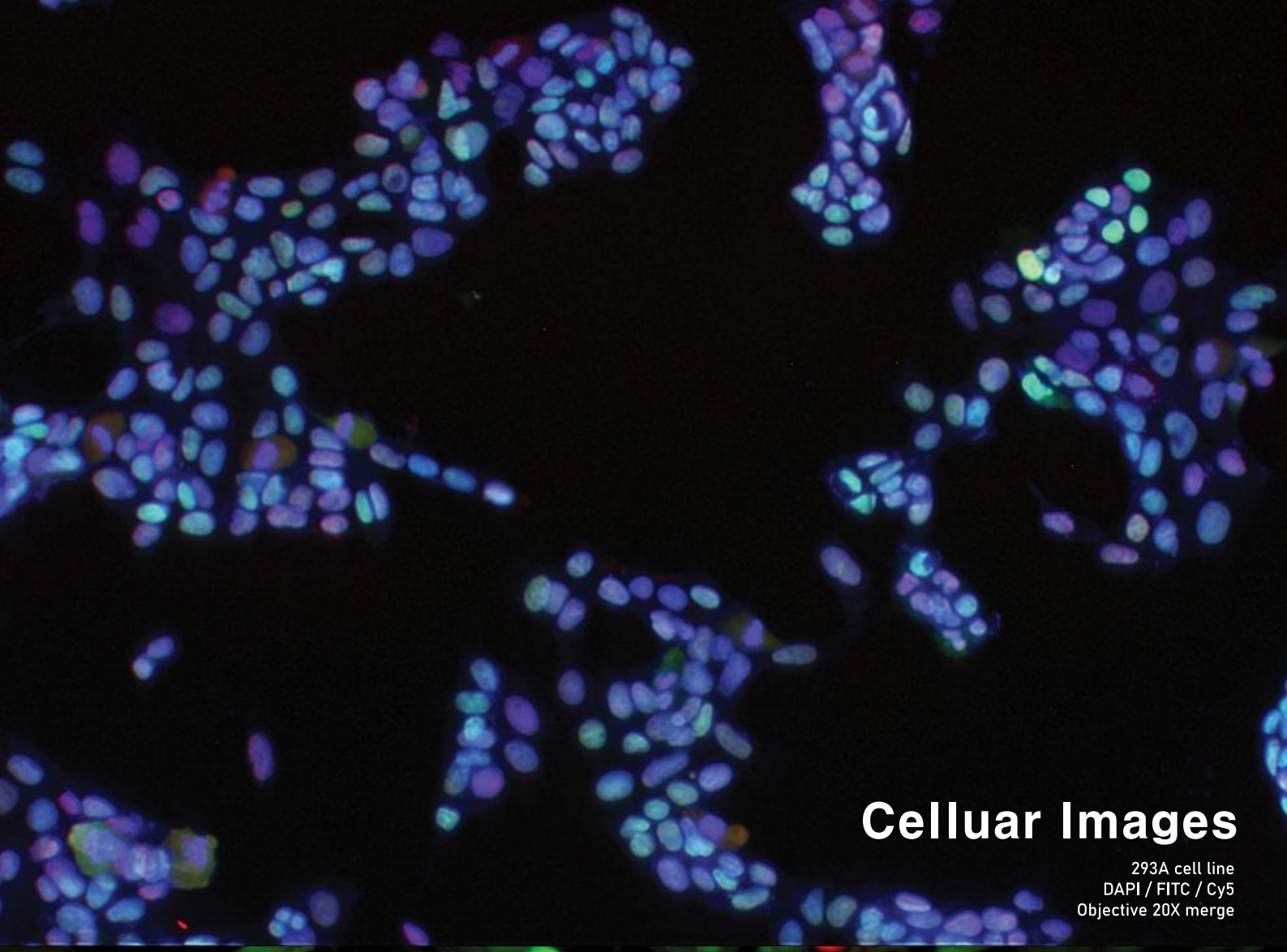


Human Brain Model

A21-18_AMYG1
GFAP(488)
4Rtau(594)
40X merge

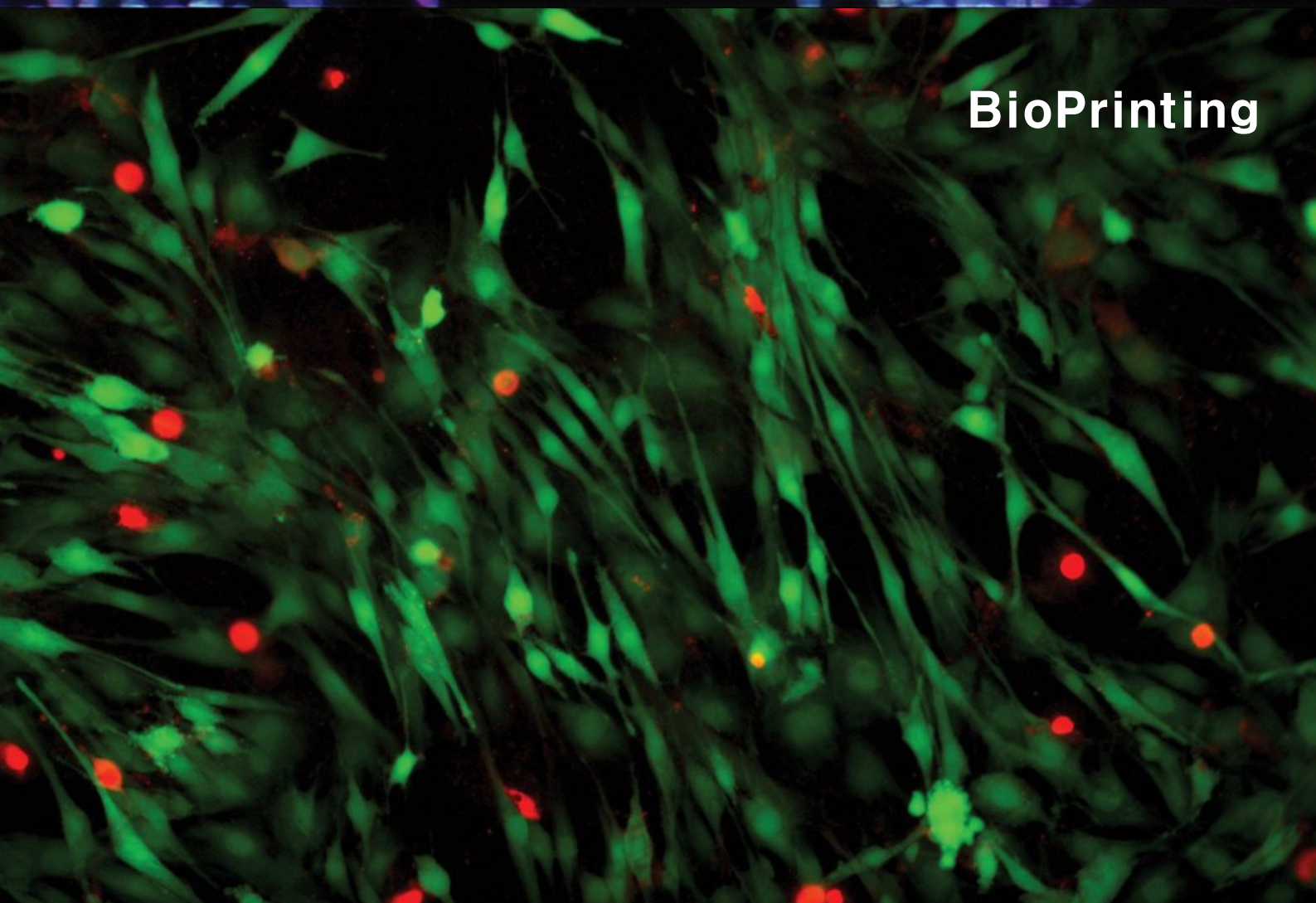


A21-18_AMYG1
p-TDP43(488)
GFAP(594)
40X merge

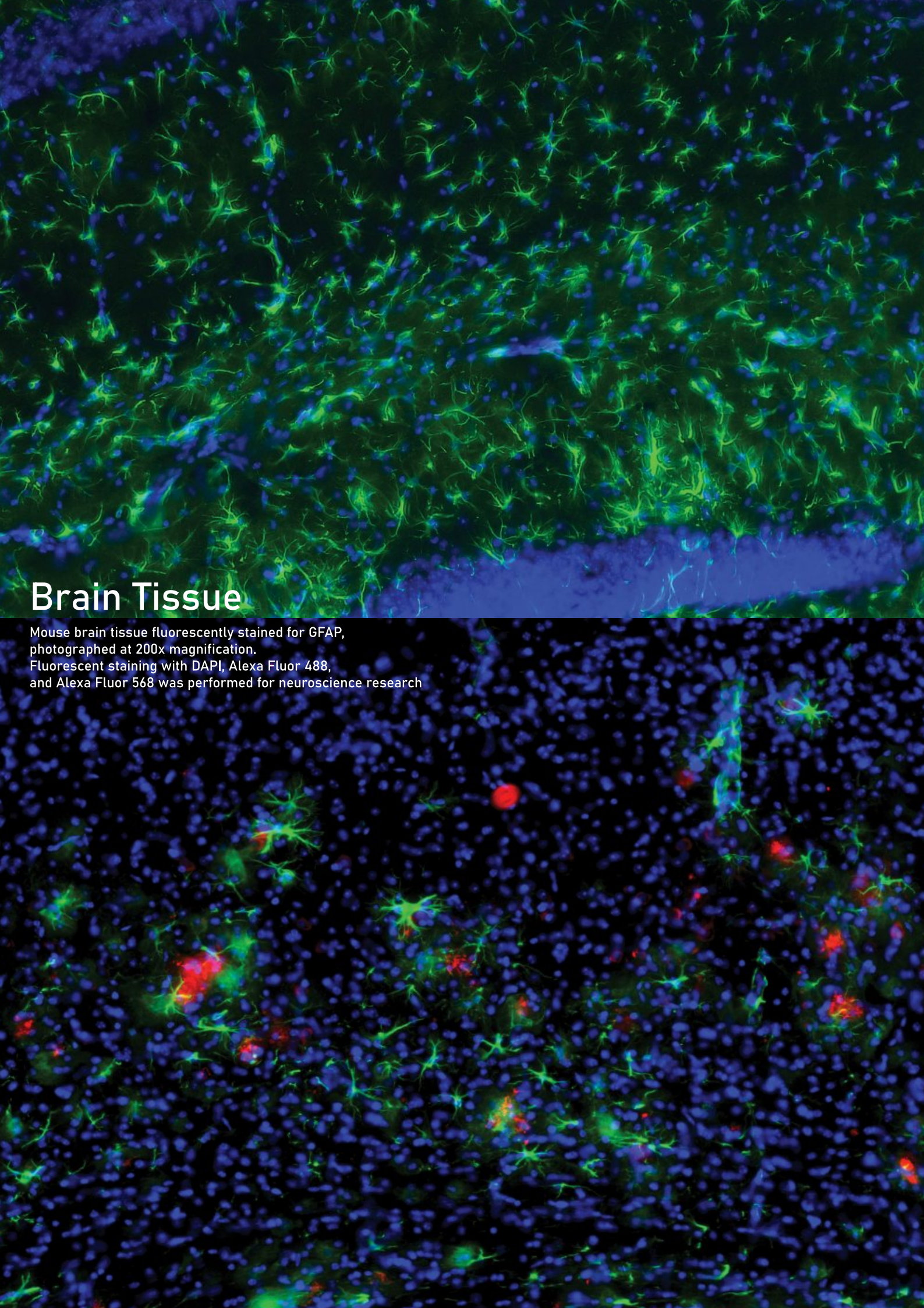


Celluar Images

293A cell line
DAPI / FITC / Cy5
Objective 20X merge

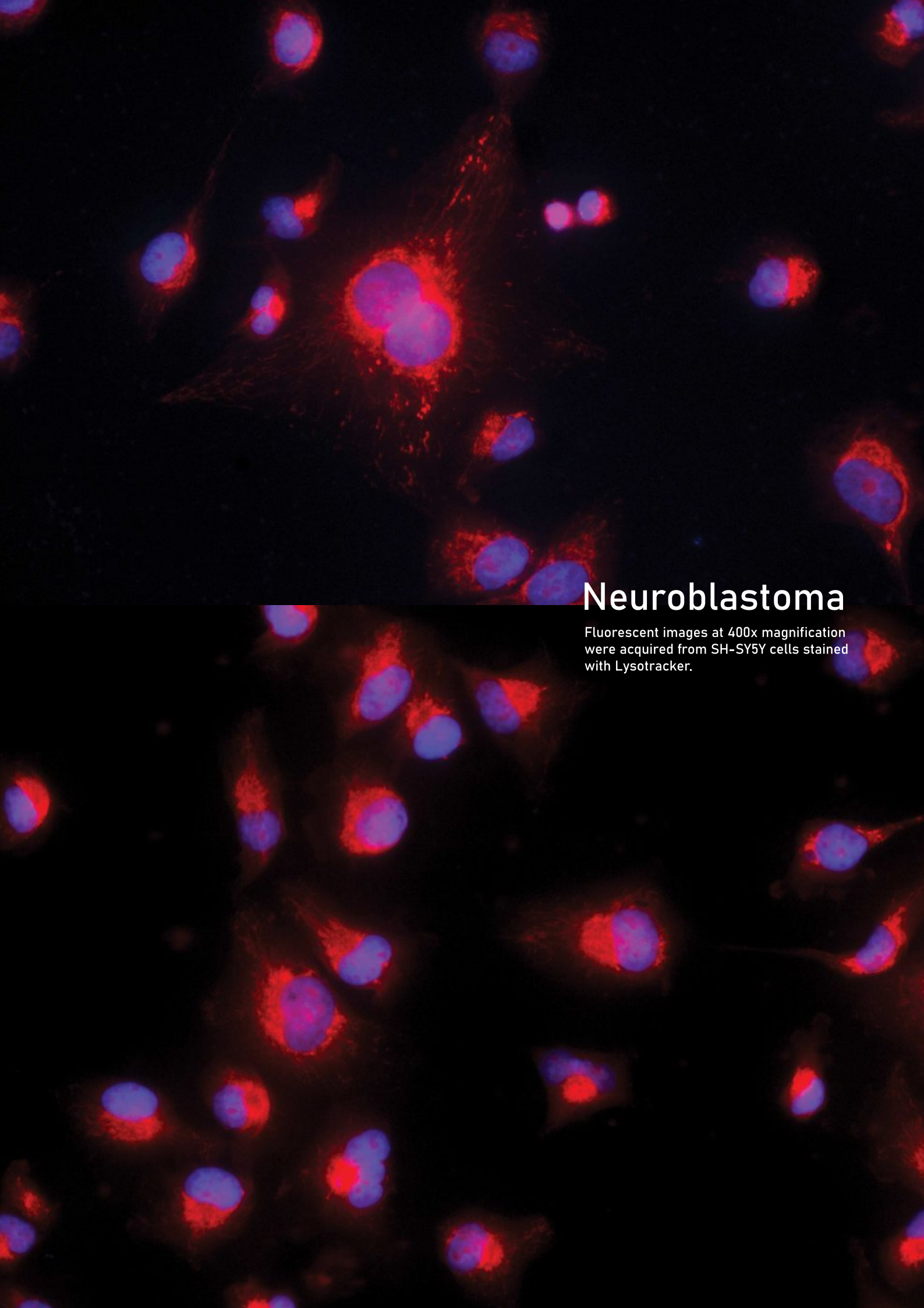


BioPrinting



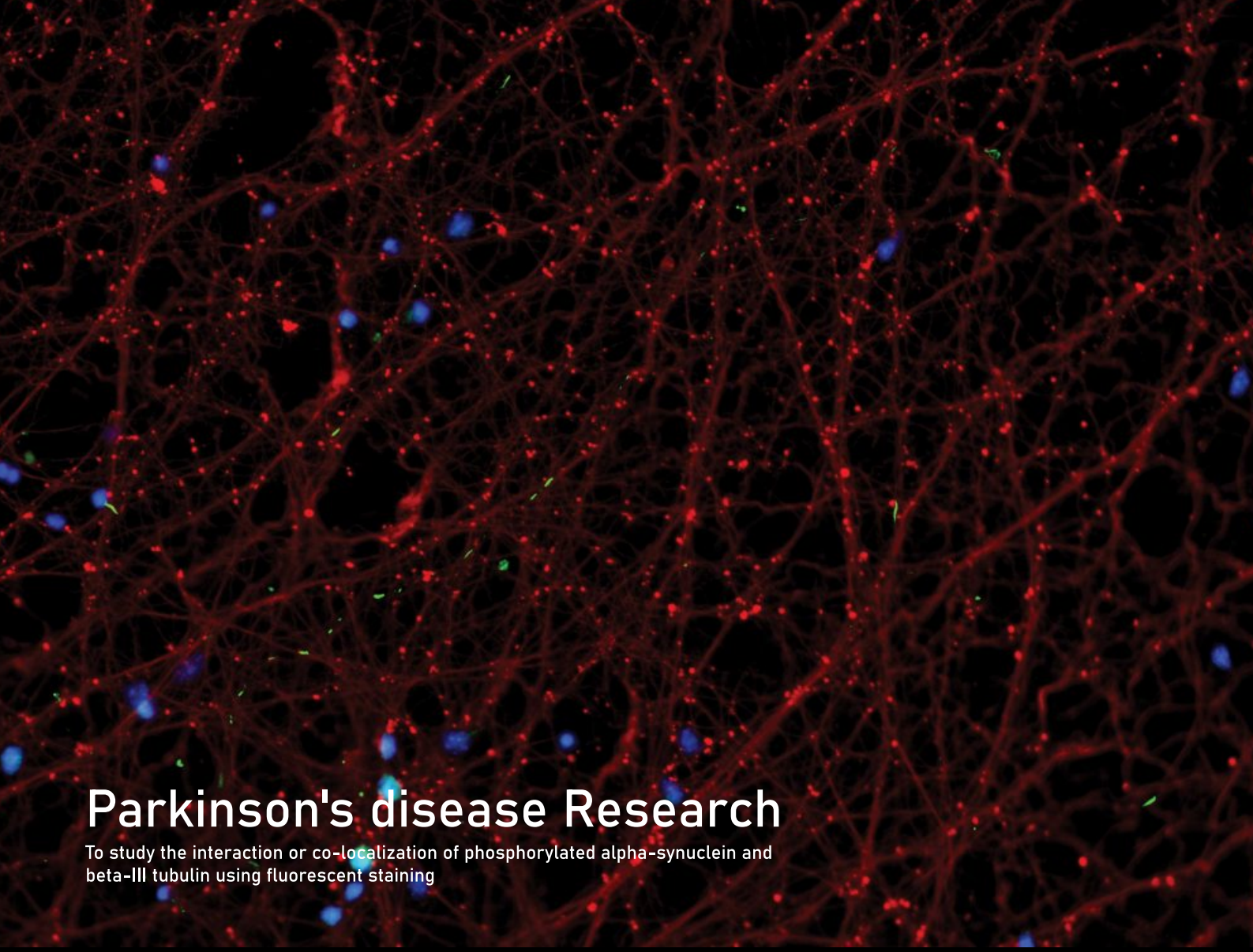
Brain Tissue

Mouse brain tissue fluorescently stained for GFAP,
photographed at 200x magnification.
Fluorescent staining with DAPI, Alexa Fluor 488,
and Alexa Fluor 568 was performed for neuroscience research



Neuroblastoma

Fluorescent images at 400x magnification were acquired from SH-SY5Y cells stained with Lysotracker.

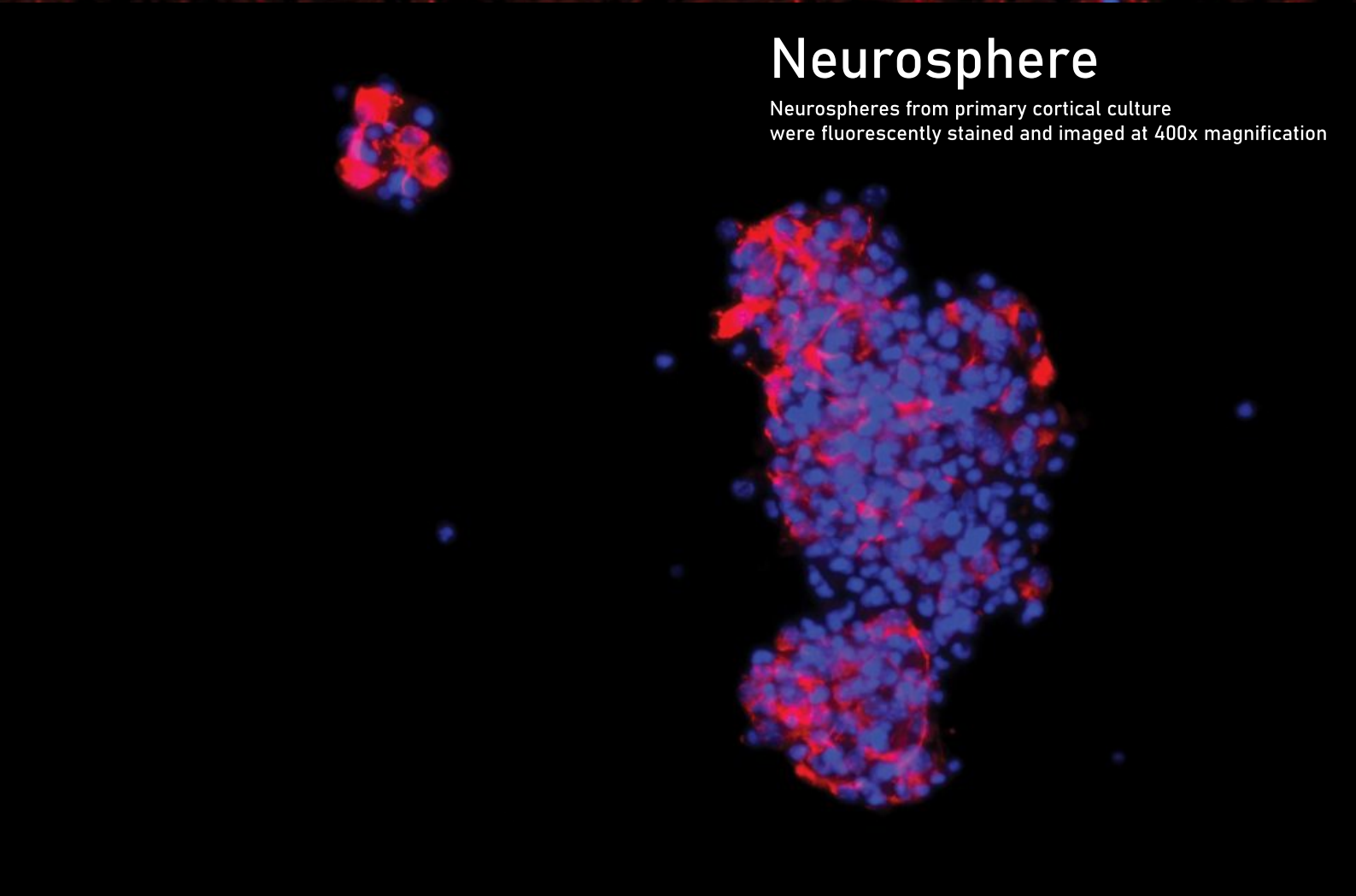


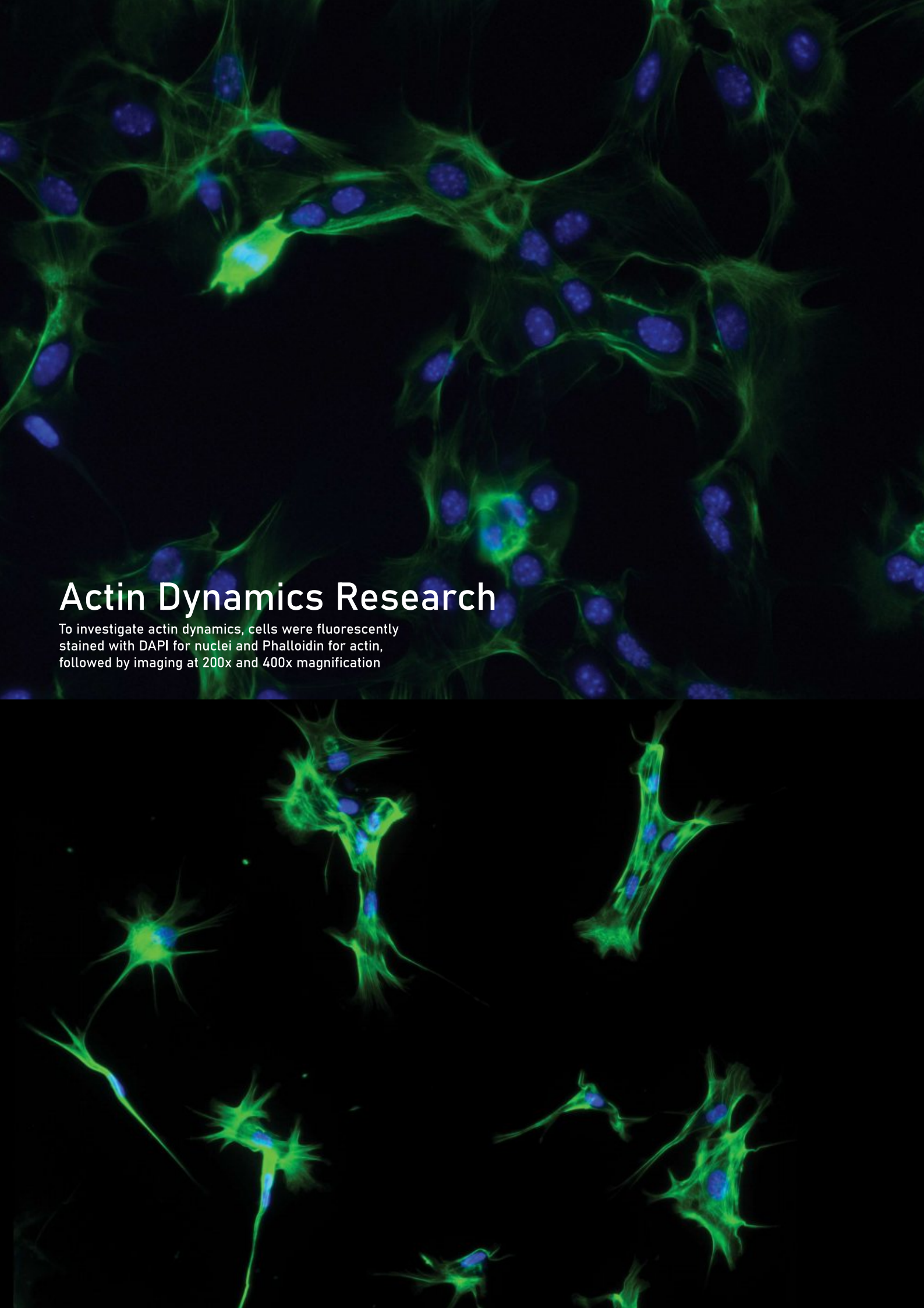
Parkinson's disease Research

To study the interaction or co-localization of phosphorylated alpha-synuclein and beta-III tubulin using fluorescent staining

Neurosphere

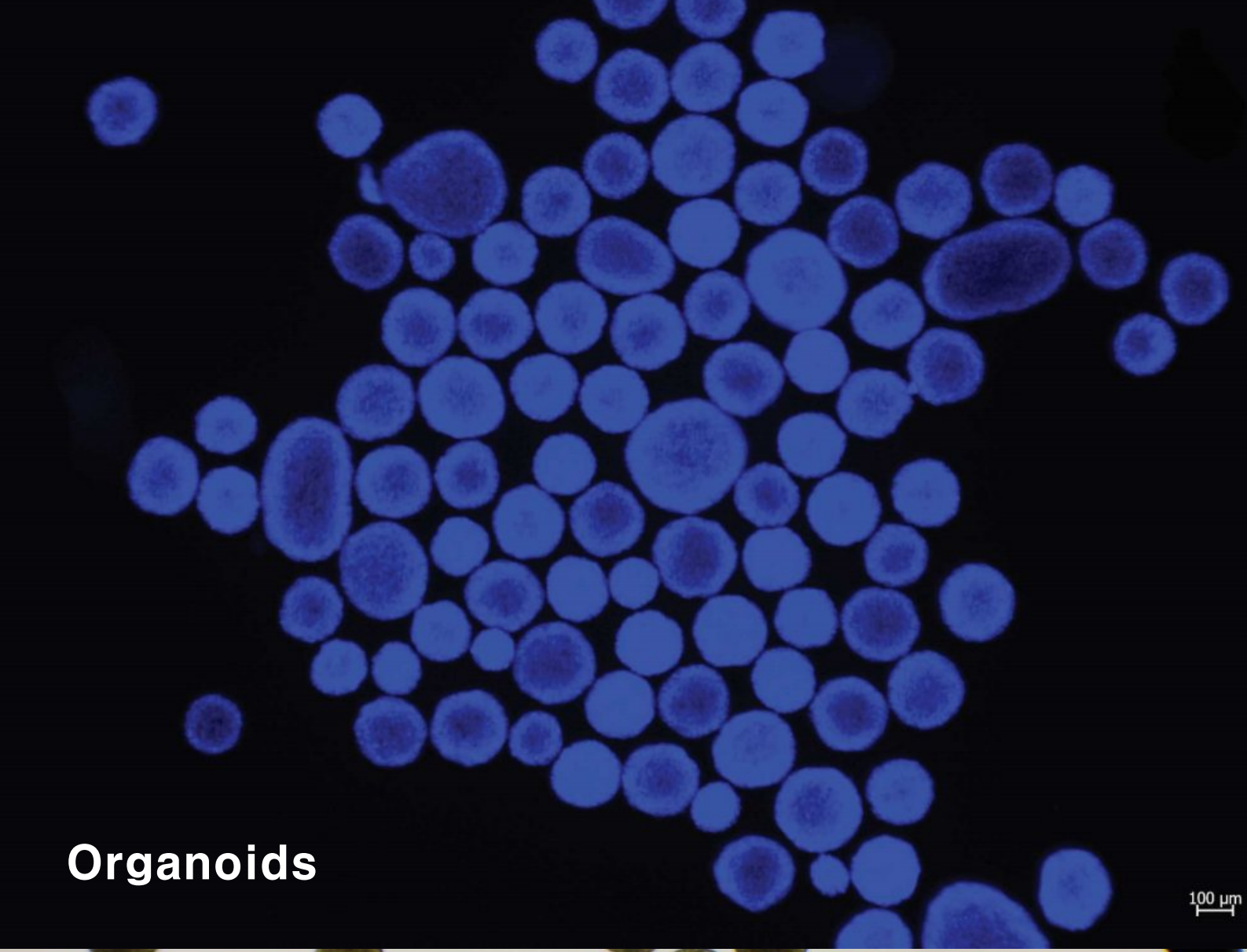
Neurospheres from primary cortical culture were fluorescently stained and imaged at 400x magnification

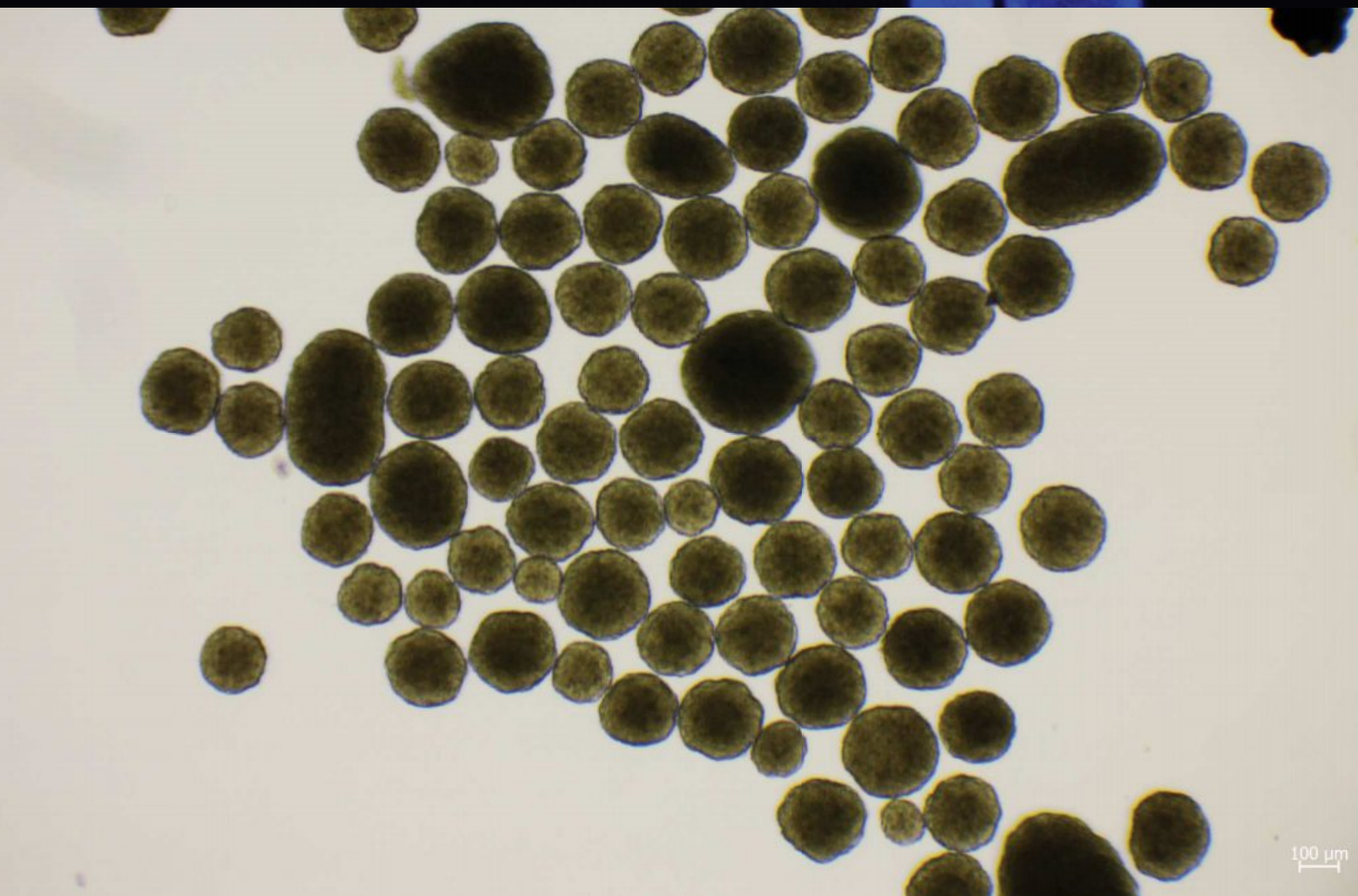




Actin Dynamics Research

To investigate actin dynamics, cells were fluorescently stained with DAPI for nuclei and Phalloidin for actin, followed by imaging at 200x and 400x magnification


Organoids
100 µm


100 µm

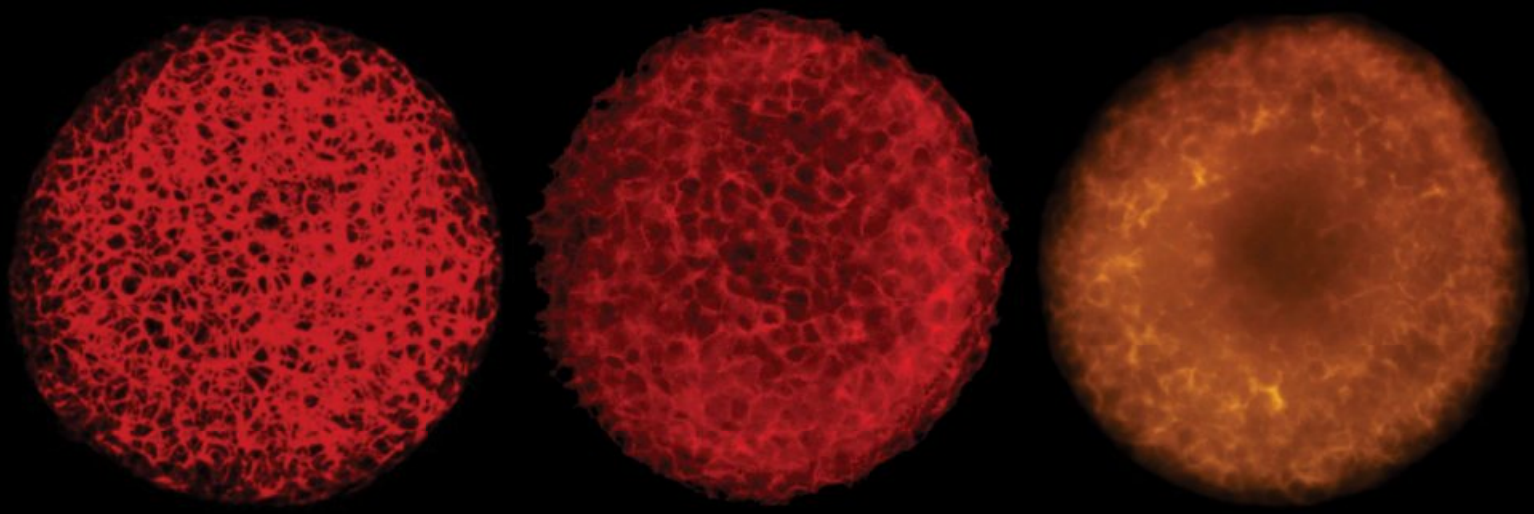
Spheroids

TPBC(Triple-positive breast cancer) model / E-cadherin / Diameter 300um / 20X Z-Stack

Confocal microscope (JAPAN)

Red

Fluorescence microscope (Germany)

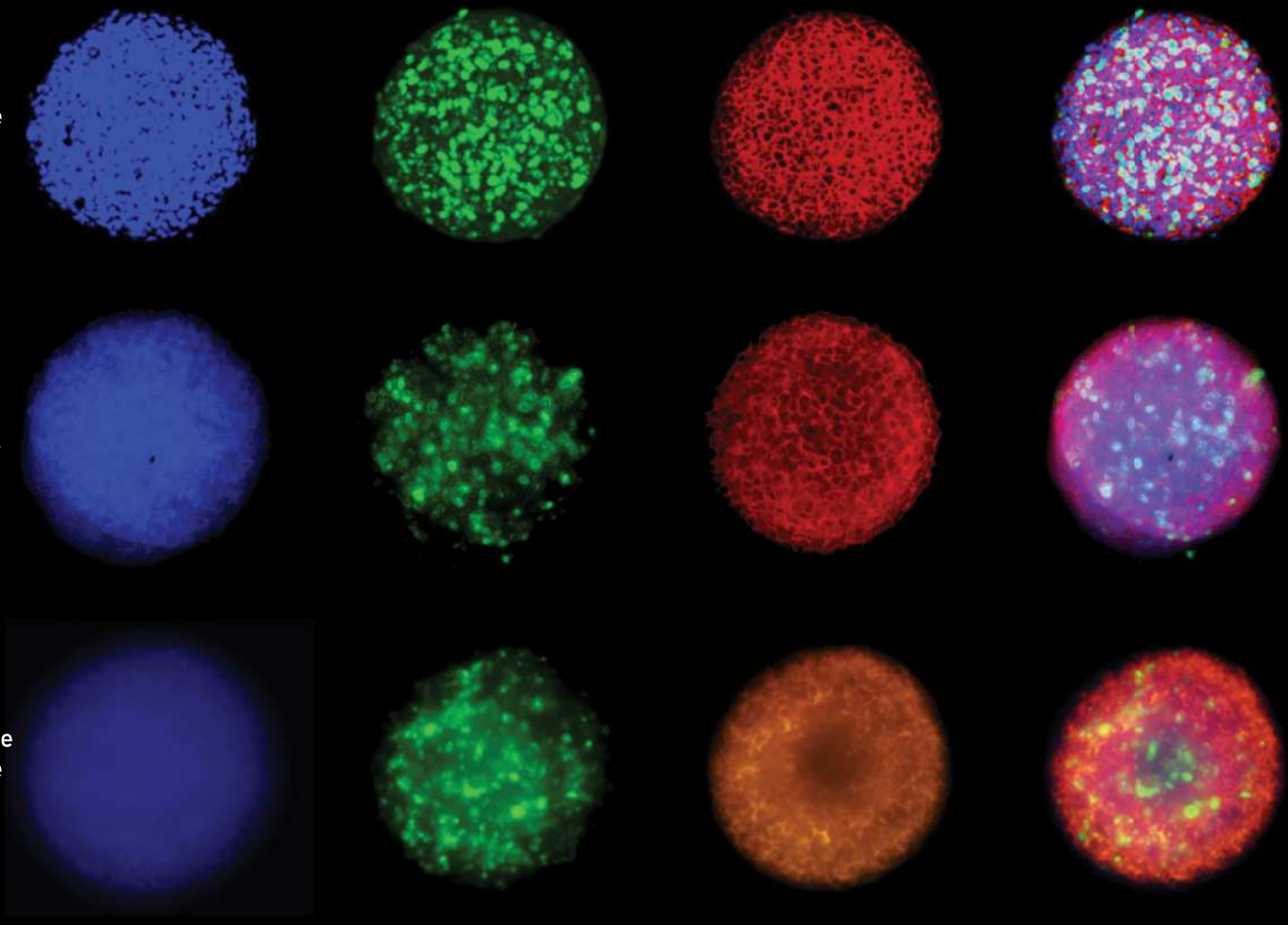


DAPI | Ki-67 | E-cadherin | Merge

Confocal microscope (JAPAN)

Red

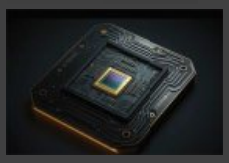
Fluorescence microscope (Germany)



300 um

Fluorescence Microscopy Fundamentals

Easy-to-Operate Design
The Red microscope uses LED illumination that eliminates the need for bulb centering, providing a compact and user-friendly experience.



High-Resolution Imaging
With a 12MP CMOS camera and objective lenses ranging from 1.25X to 100X, the Red delivers high-quality, detailed images.

Comprehensive Filtering
A wide range of fluorescence filters, including Cy5, Texas Red, mCherry, Cy3, TRITC, GFP, FITC and DAPI are available for versatile imaging.

Specification of Red

Microscope Model : RF40	Observation Method	Bright field, Fluorescence, Phase contrast			
	Sample Holder	Culture dish, Culture flask, 96well, 48well, 12well, 6well, plate, slide glase, confocal dish			
	Objectives	Plan fluor 4X, 10X, 20X, 40X (optional 1.25X, 2X, 60X) with 5-nospiece position turret			
	Transmitted illuminator	Bulit-in transmited white LED source (adjustable) with ND filter, Phase plate wheel			
	Stage	Stage size: 277.5 x 210mm / X-Y mechanical stage moving range: 120x80mm			
	Focus	Focus knob resolution : 1 um			
	Fluorescence parts	High power 4 channel peak LED (wave length 365nm, 465nm, 550nm, 620nm)			
		DAPI	EX375/28nm	EM460/50nm	DM415nm
		FITC	EX480/30nm	EM535/40nm	DM505nm
		Texas Red	EX560/40nm	EM635/60nm	DM600nm
		Cy5	EX620/60nm	EX700/75nm	DM660nm
Camera	Sensor	12 Megapixel, 1/1.8 inch, Sony IMX226 color sensor with USB3.0 interface			
	Resolution	Maximum 4000x3000 / 2000x1500			
Software	Software	Red Image Analysis Software (Made by LE.AM Solution Inc.)			
	Functions	Capture, Save, Quick & Batch Save, BF mode, Fluorescence mode, R-G-B Manual & Auto Merge, Back ground black balance. Scale bar on the image, Fluorescence cell count, Auto Image intensity > CX/ CY/ Width / Height / Area / Intensity Min / Intensity Avg / Intensity Max. Video recording, Time lapse, Z-stack multiple images [Image file Formats : TIFF, BMP, PNG, JPG]			
Environment	Dimension	W302 X D311 X H329 mm			
	Weight	Approximately 25.6kg			
	Power consumption	230.1 W			
	Electrocal Ratings	Power Adaptor : INPUT AC 100-240V~, 50/60Hz, 3.5A / OUTPUT DC 19.5Vdc, 11.8A			
		RF40 Equipment: INPUT DC in 19.5V, 11.8A			

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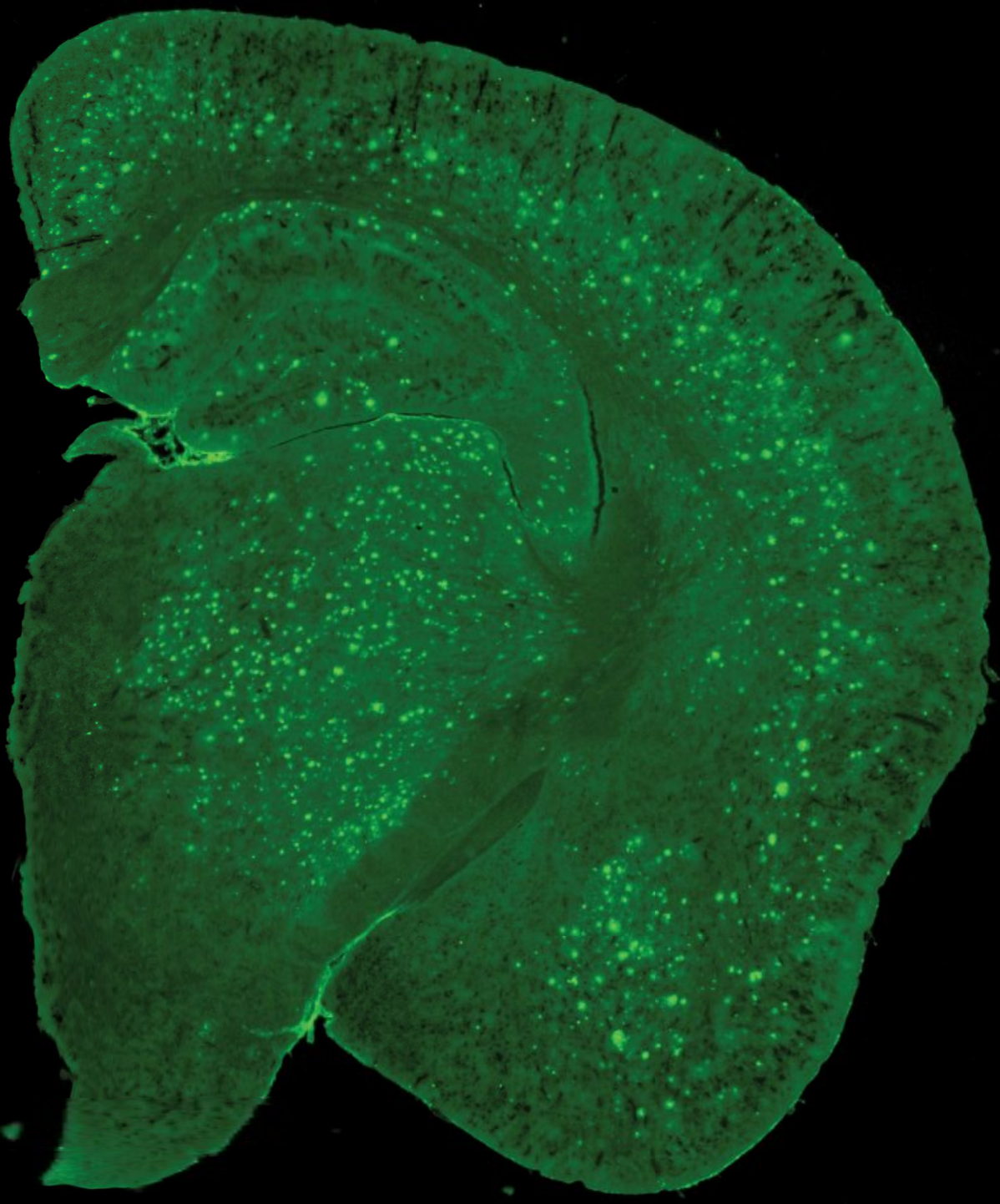

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