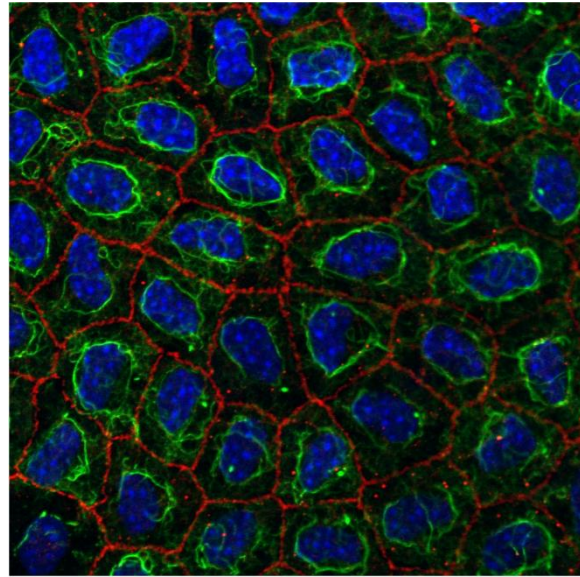


## Zeiss LSM510



Mouse cornea endothelial cell image courtesy of Carlo Iomini, [Marek Mlodzik Lab.](#)

This is an inverted confocal microscope with four lasers: a UV Diode (405 nm), an Argon laser (458nm, 477nm, 488nm, 514nm), a green HeNe (543nm) and a red HeNe (633nm). The detection system has a META detector, two PMTs, and a transmitted light PMT. The META detector can be tuned to different wavelengths and performs spectral scanning of fluorescence for emission "fingerprinting" and for separation of overlapping fluorophore emission profiles. The stage can take adapters for well plates and dishes.

### Confocal Specifications

Laser Lines	Detectors	Emission Filters	Dichroics	Scan Modes	Bit Depth	Resolution
<b>405 diode</b>	PMT 1	LP420	HFT UV/488/543/633	line	8 and 12	max: 2048x2048
<b>Argon (458, 477, 488, 514)</b>		LP475	HFT 405/488/543	frame		min: 128x128
<b>HeNe 543</b>		LP505	HFT 405/514	ROI		
<b>HeNe 633</b>		BP420-480	HFT 458/514	Spectral Deconvolution		
		BP470-500	HFT 488/543			
		BP475-525	HFT 458			
		BP505-530	HFT 488			
	PMT 2	LP505				
		LP560				
		LP650				
		BP500/20 IR				
		BP505-530				
		BP505-550				
	BP530-600					
	BP560-615					
	META detector	Tunable				

### Objectives

Magnification	Immersion	NA
<b>10x</b>	Air	0.3
<b>20x</b>	Air	0.75
<b>40x</b>	Oil	1.3

<b>63x</b>	Oil	1.4
<b>63x</b>	Water	1.2
<b>100x</b>	Oil	1.4