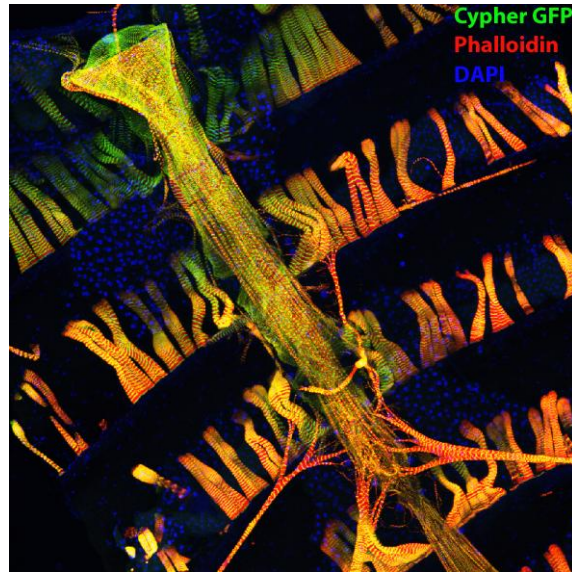


Leica SP5 DM



Drosophila heart image courtesy of Jianbo Na, [Ross Cagan Lab](#).

This is an upright confocal microscope with four lasers: a UV Diode (405nm), an Argon laser (458nm, 476nm, 488nm, 514nm), a HeNe (543nm), and a HeNe (633nm) laser. The system has a spectrophotometer scan head that allows the user to tune the four PMT detectors to any emission wavelength, and it allows simultaneous imaging with an additional transmitted light detector. It can also perform spectral scanning of fluorescence for generation of dye emission spectra and for separation of dyes with overlapping emission spectra. It also features a motorized stage that can mark and find multiple points and automate montage acquisition and stitching to generate high resolution images of large areas.

Confocal Specifications

Laser Lines	Detectors	Emission Filters	Dichroics	Scan Modes	Bit Depth	Resolution
405 Diode	4 PMTs	Tunable	RT 30/70	Line	8, 12, 16	max: 8192 x 8192
Argon (458, 476, 488, 514)	1 Trans PMT		DD 488/543	Frame		min: 16 x 16
HeNe 543			RSP 500	ROI		
HeNe 633			Substrate	Spectral deconvolution		
			TD 488/543/633	Time lapse		
			DD 458/514	Montage		
				FRAP		
				FRET		

Objectives

Magnification	Immersion	NA
10x	Air	0.4
20x	Air	0.7
40x	Oil	1.25
63x	Oil	1.4
10x (dipping)	Water	0.3
20x (dipping)	Water	0.5
40x (dipping)	Water	0.8