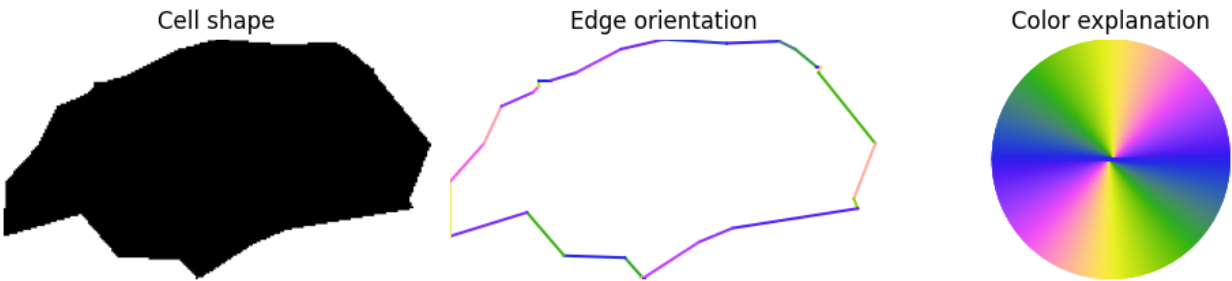


Read in the image, annotations and the data frame

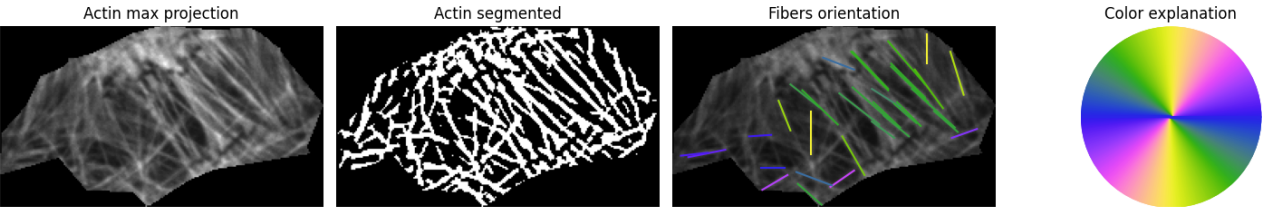
(27, 4, 512, 512)

Visualize orientation of cell edge

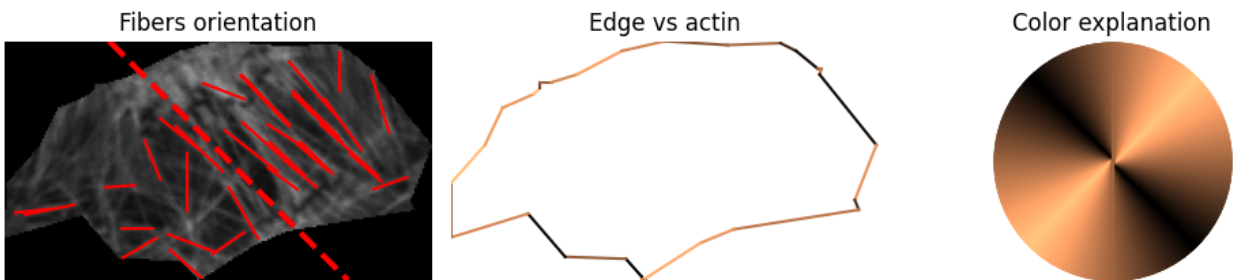
label	2
area	17456
centroid-0	326.136801
centroid-1	245.599736
bbox-0	269
bbox-1	135
bbox-2	391
bbox-3	353
eccentricity	0.863103
orientation	-1.429548
intensity_image	[[[0, 0, 0, 0, 0], [0, 0, 0, 0, 0], [0, 0, 0, ...
image	[[False, False, False, False, False, False, Fa...
image_name	092622_ring_PDMSAp_10MCol_647-Act_561-Pax_488-...
vertices	[[390.5, 234.0], [390.5, 232.0], [389.0, 232.5...
membrane_orientation	[1.5707963267948966, -0.32175055439664213, 0.7...
actin_detected	[[[10, 88], [35, 83]], [[190, 68], [161, 42]],...
actin_angles	[-1.373400766945016, 0.8398896196381798, 0.805...
actin_orientation	0.785398
actin_spread	1.195119
plak_signal	[1357.0, 1275.0, 1378.0, 1378.0, 1454.0, 1527....
outside_ring_regions	[[0, 108, 18], [0, 109, 18], [0, 110, 18], [0,...
signal_edge_00	[1345.6129032258063, 1315.0406091370558, 1729....
signal_edge_01	[652.883064516129, 901.5228426395939, 731.8295...
signal_edge_02	[264.09274193548384, 299.6852791878173, 425.71...
signal_edge_03	[149.31451612903226, 153.55329949238578, 155.0...
signal_radial_00	[66.7315761768687, 88.44051737103324, 74.47289...
signal_radial_01	[25.995676041510002, 33.55004511956685, 29.377...
signal_radial_02	[28.75045119566852, 34.718115506091145, 26.360...
signal_radial_03	[6.841442322153707, 8.951195668521581, 7.74936...
Name: 1, dtype: object	



Visualize actin orientation

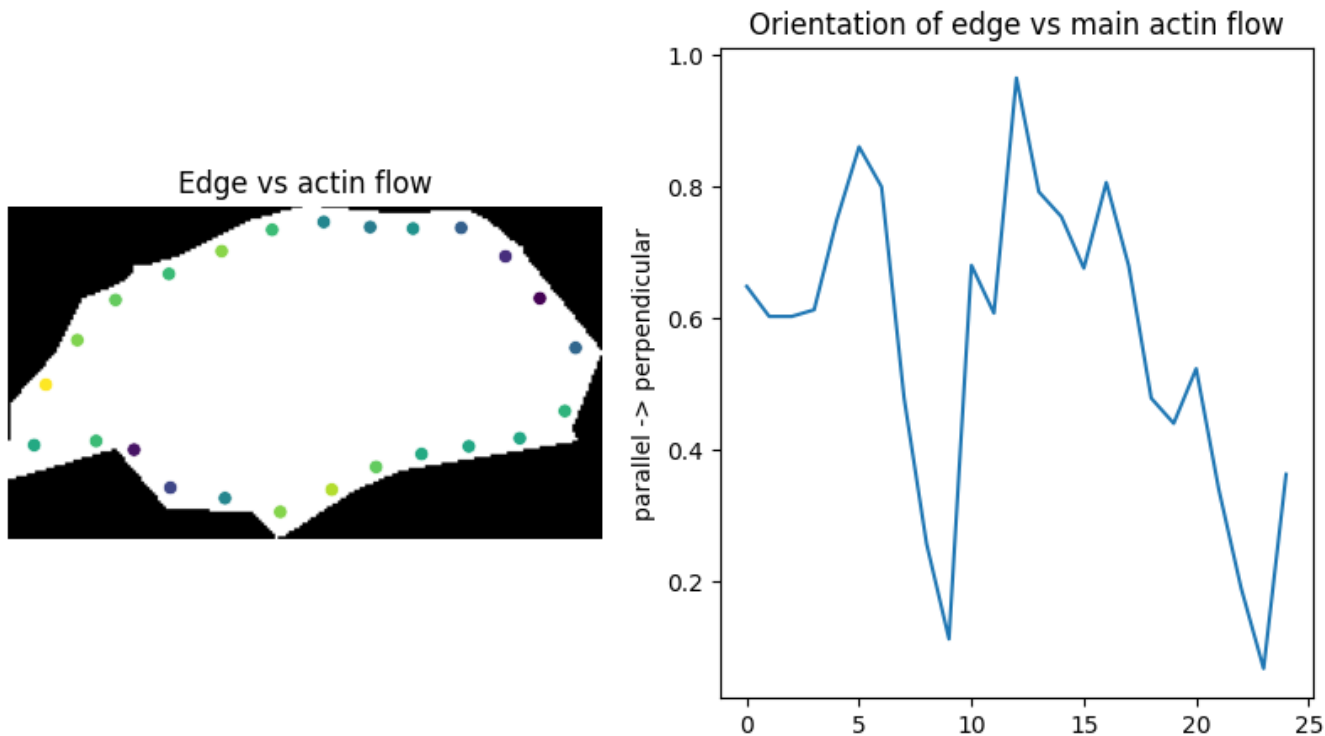


Edge orientation vs main flow of actin



Calculate edge orientation based on edge regions

`Text(0, 0.5, 'parallel -> perpendicular')`

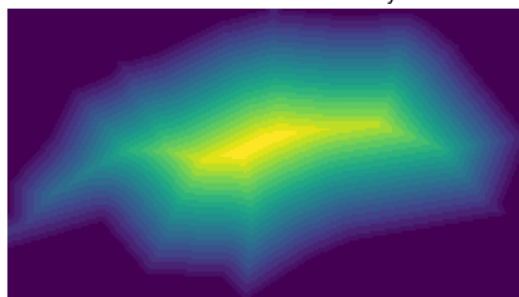


Characterize distribution of plakoglobin

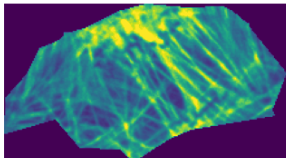
Order of edge measurements



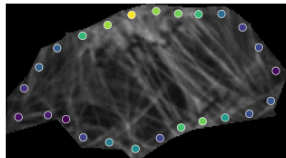
Visualization of concentric layers



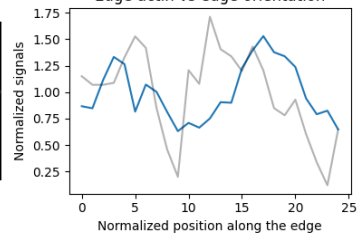
actin image



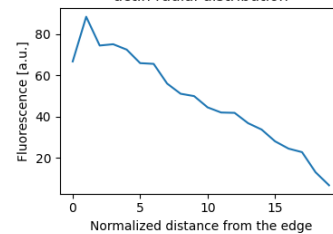
Detected signal at the edge



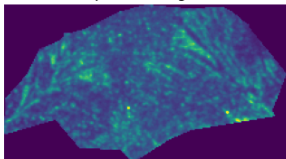
Edge actin vs edge orientation



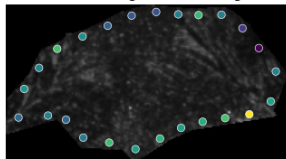
actin radial distribution



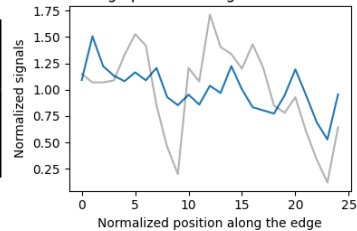
paxilin image



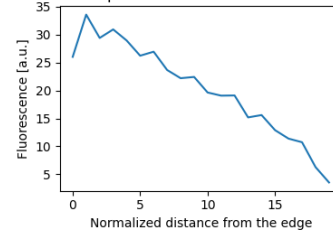
Detected signal at the edge



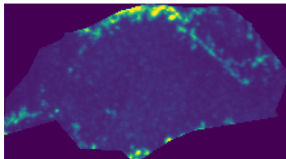
Edge paxilin vs edge orientation



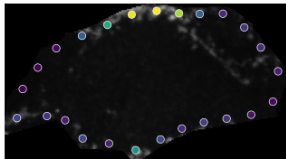
paxilin radial distribution



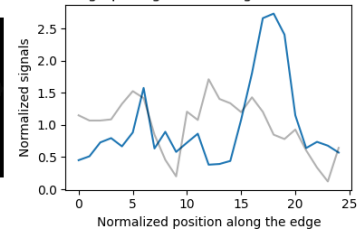
plakoglobin image



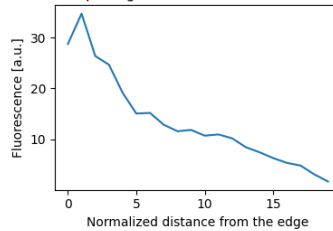
Detected signal at the edge



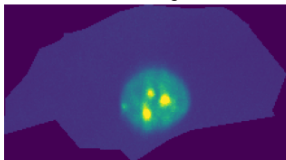
Edge plakoglobin vs edge orientation



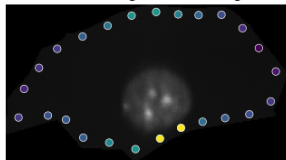
plakoglobin radial distribution



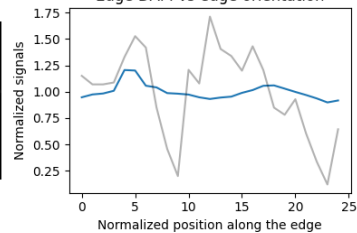
DAPI image



Detected signal at the edge



Edge DAPI vs edge orientation



DAPI radial distribution

