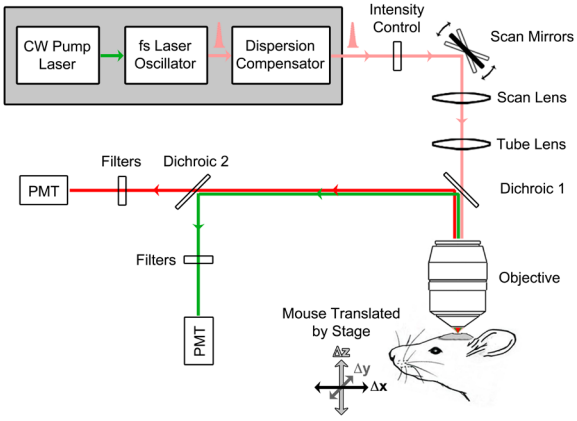
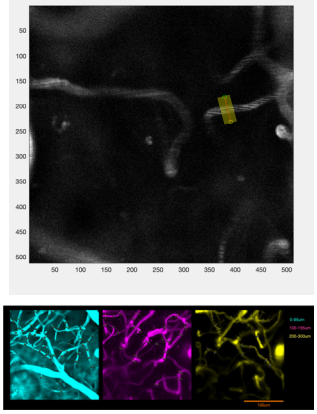


200-300 micron-thick
Z-stacks at 2-3 ROIs
within the cranial window

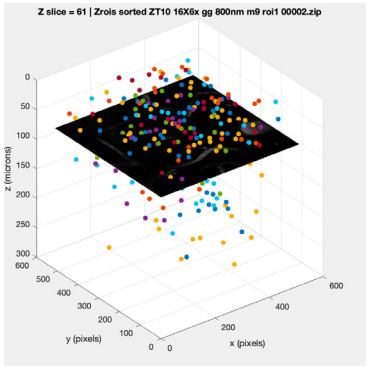


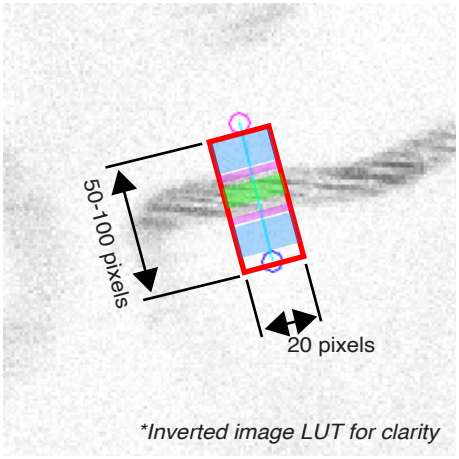
Identify line-ROIs for vessel
measurements in XYZ
(0.20x0.20x0.25mm =~0.01mm^3) (FIJI)

Extract data from stacks using FIJI scripts
Pre-process FIJI data using MATLAB

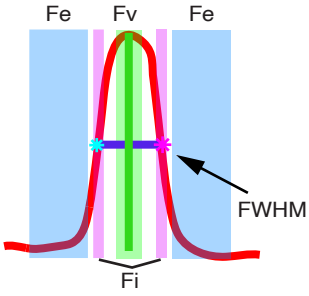
Import MATLAB data into Python

Grab intensities from
all T-Z slices calculate
mean FWHM, local intensity





*Inverted image LUT for clarity



Fe--> 10 pixels (2.88 microns) (Inside vessel fluoro. intensity)

Fi--> 5 pixels (nwall_pixels) about FWHM xvals (✳ ✳)
(1.44 microns, eg - 'fi1_tmp_indices_start')

Fv--> 9 pixels about 'PEAK PROMINENCE'
(2.60 microns)

> Calculate the mean of each vector (for final Fe, Fi, Fv values)

Analysis (data visualization, stats)
(Python + gpt3.5/4o, Claude3.5, llama3.1)

Upload figures and any statistics results test
Prompt with some experimental details/context

Results summary (Vetted/edited)
(e.g., plots, Claude3.5 > data summary report)