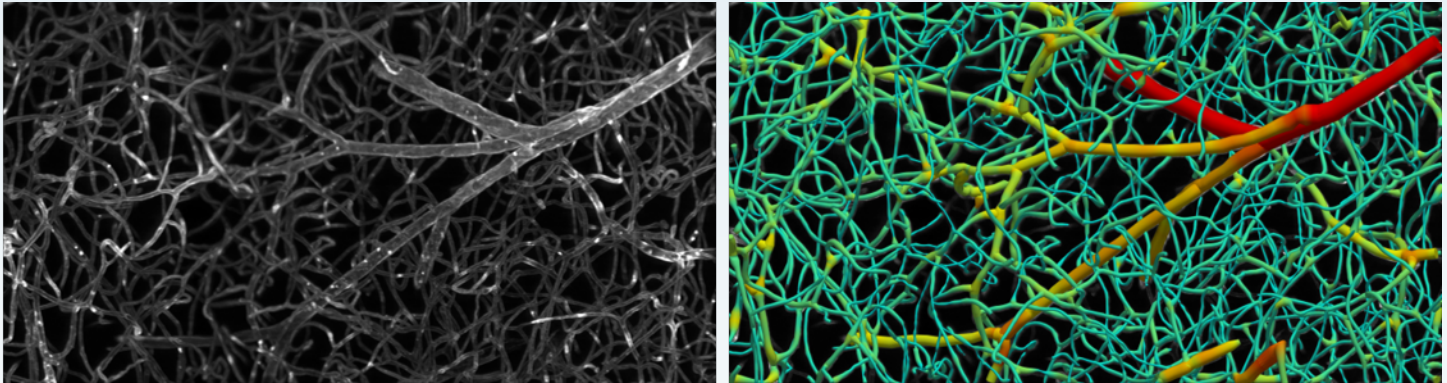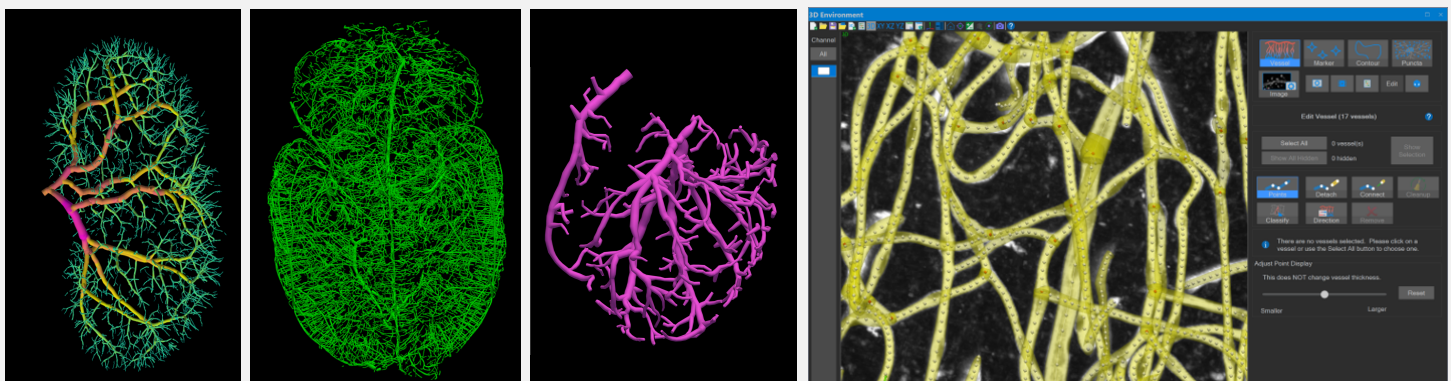# Vesselucida® 360

Quantitative and Visual Analysis for Vessels and Microvasculature

Use Vesselucida 360 to quickly and accurately segment complex vasculature in an intuitive 3D workspace. Generate reliable, quantitative data on the length, connections, and complexity of microvessels to empower your research on angiogenesis in cancer, diabetic retinopathy, stroke and traumatic brain injury, and other conditions that affect microvasculature.

Automatically Reconstruct and Analyze Vasculature in 3D

- Automatically detect vessels even in challenging specimens
- Use images obtained from confocal, two-photon, micro-CT, multichannel fluorescence, and light sheet microscopes
- Work with images of all sizes from whole organs, sections, or slabs
- Generate data based on ground truth using robust editing capabilities
- Work dynamically with large images in manageable sub-volumes, cut planes, and partial projections for better visualization
- Examine networks at multiple levels, including nodes, anastomoses, puncta
- Process and trace many images with batch tools

Vesselucida® Explorer

Transform Your Data Into Results

Quantitatively analyze the morphological data with Vesselucida Explorer – the analytical software companion included with Vesselucida 360. Use it to perform extensive quantitative morphometric analyses designed specifically for microvasculature models and serial-section reconstructions.

Rapidly Perform Dozens of Analyses to Calculate and Graph Hundreds of Metrics

- Analyze structural morphology of vessel segments and networks such as **length, diameter, volume, tortuosity**
- Characterize **distribution, orientation, and colocalization** of features in your microvasculature models
- Generate comprehensive quantitative data tables that you can **easily export** for use in statistical and spreadsheet software
- Create **graphical displays** to visualize quantitative results in intuitive ways and use these high-quality displays in figures for publications and presentations
- Load multiple data sets into Vesselucida Explorer for **rapid, batch quantitative data analyses** with no scripting or programming skills needed

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