**Attempt 1**

1. Manual Delineation [Measure mCNV area by measuring pixels in contour]
   * 1. Selection using Polygon Selection Tool
     2. Edit->Clear Outside
     3. Image->Type->8-bit
2. Smooth Image (Gaussian Kernel)
   * 1. Process->Filter->Gaussian Blur (Radius =1)
3. Binary image (Frangi vesselness filter)
   * 1. Process->Filters->Frangi Vesselness (Apply Gaussian to all scales = True, Spacing = 1,1, Scale = 3,5)
     2. Image->Type->8 bit
4. Binary Image (local adaptiveness thresholding) [Measure vessel area, fractal dimension, vessel lengths]

* For “Before”
  + 1. Image->Adjust->Auto Threshold (Method = Mean)
    2. Process->Binary->Close
* For “After”

1. Image->Adjust->Auto Local Threshold (Method = Mean, Radius = 15)
2. Tagged Skeleton Image [Calculate number of vessels]
   * 1. Process->Binary->Skeletonise
     2. LUT->Invert LUT

**Attempt 2**