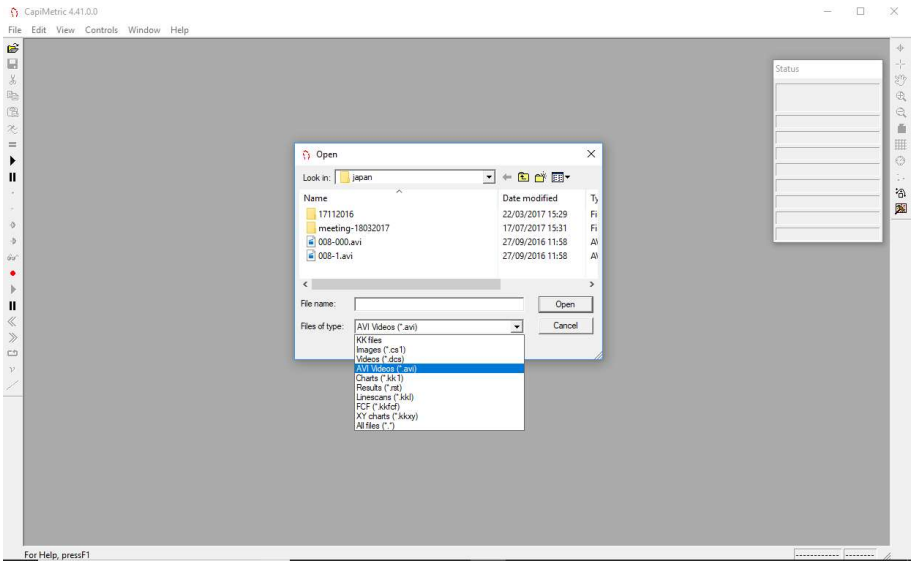
Step by Step Guide To Measuring Capillary density

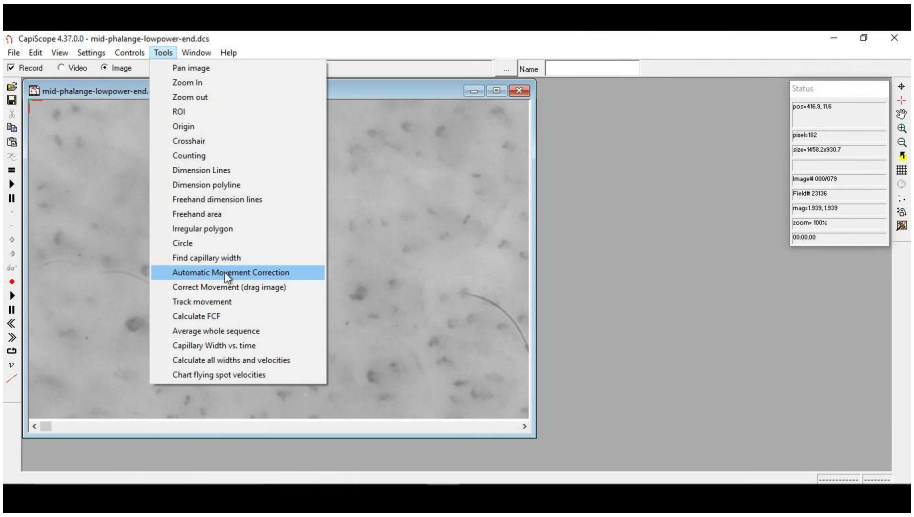
Open Video



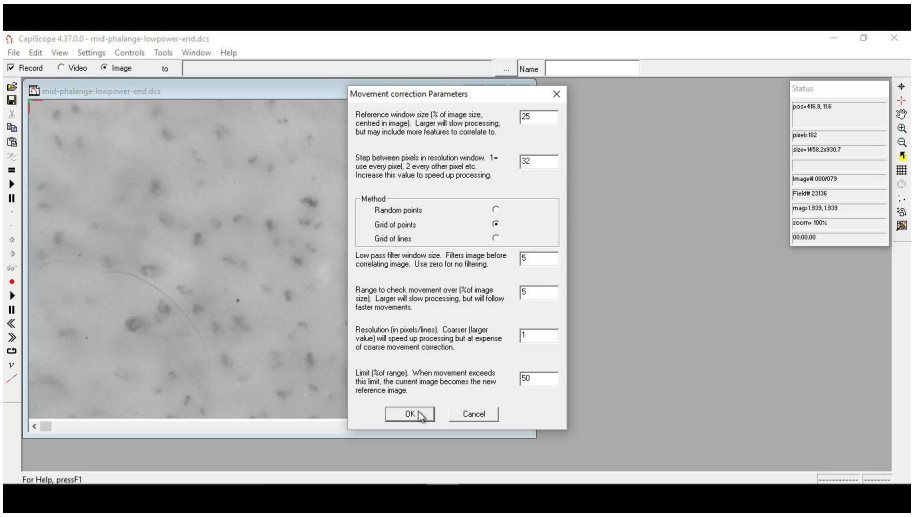
Adjust Display Contrast

Press the ‘a’ key to automatically adjust the displayed contrast without actually changing the original video recording. Press the ‘a’ key again to display normally.

Apply Movement Correction



To speed up the movement correction calculation, try changing box1 from 50 to 25, box2 from 8 to 32, and box4 from 10 to 5.

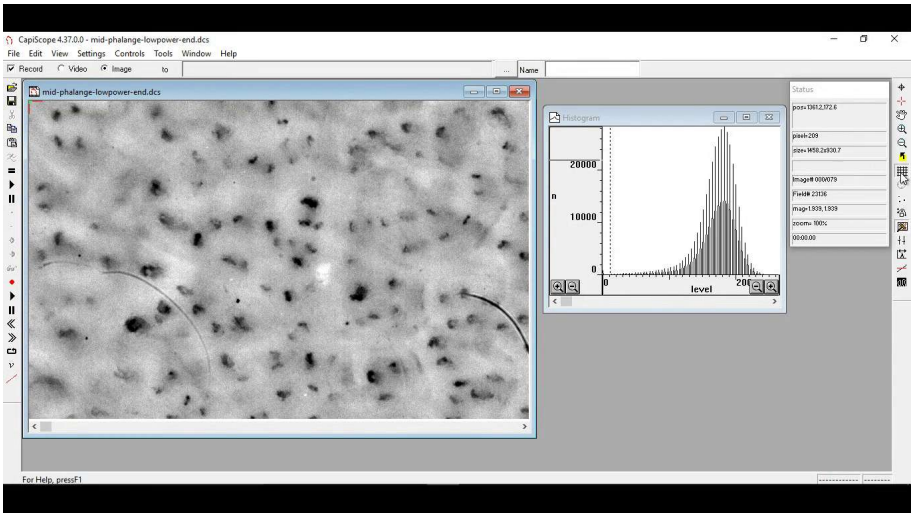


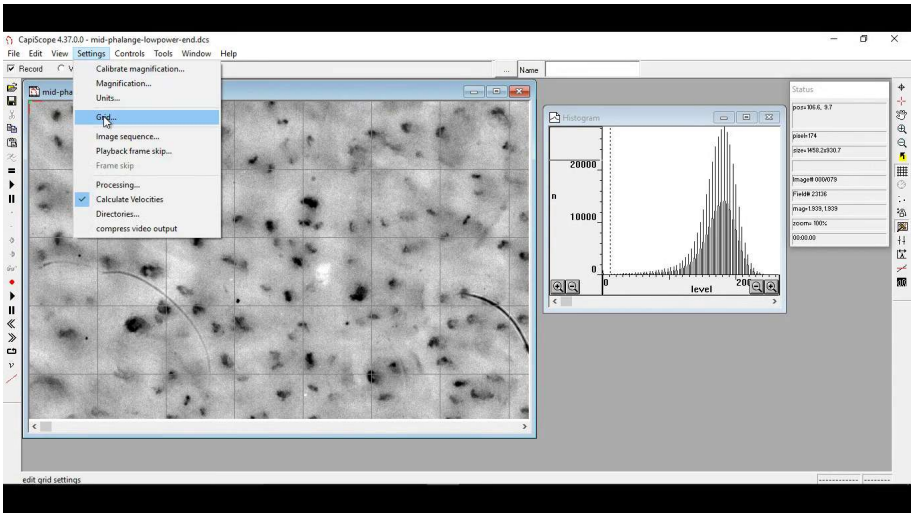
Save File

Use the Save toolbar button to save the movement correction. The original avi video file is unchanged.

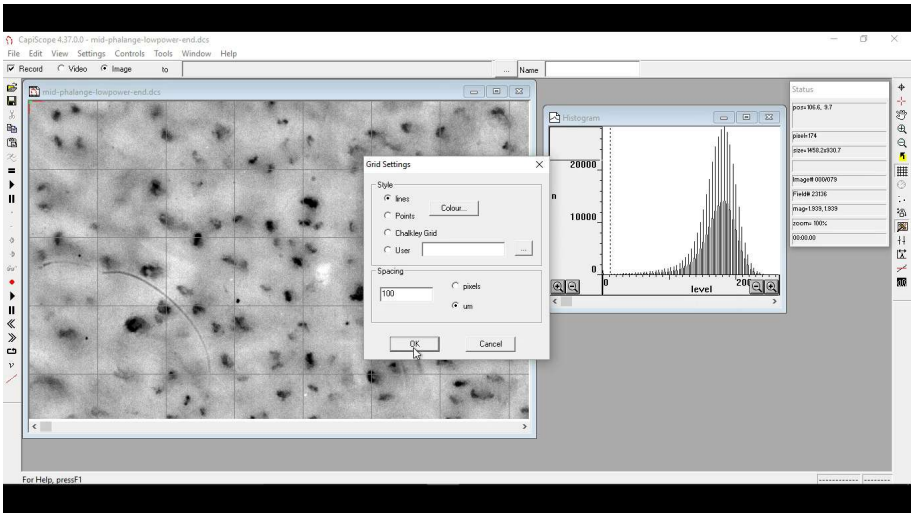
Set a Region Of Interest (ROI)

Optionally use the grid to help set a Region Of Interest (ROI)

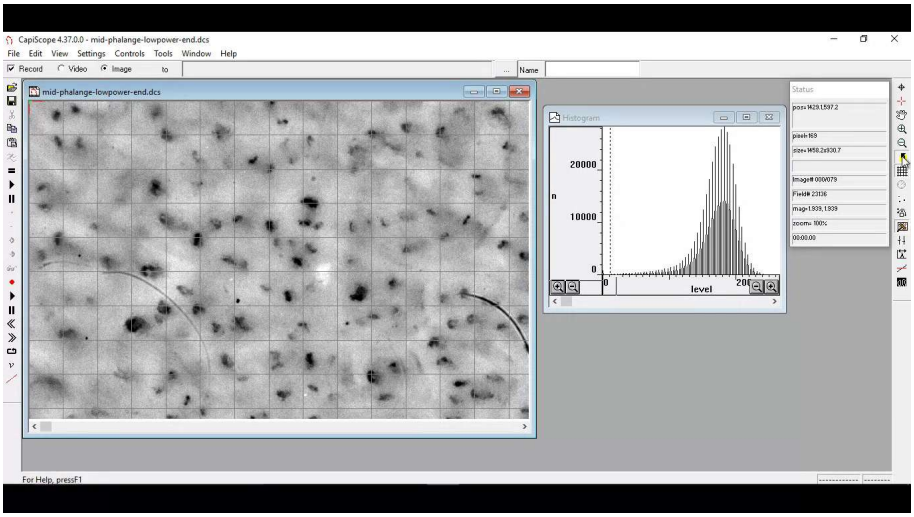




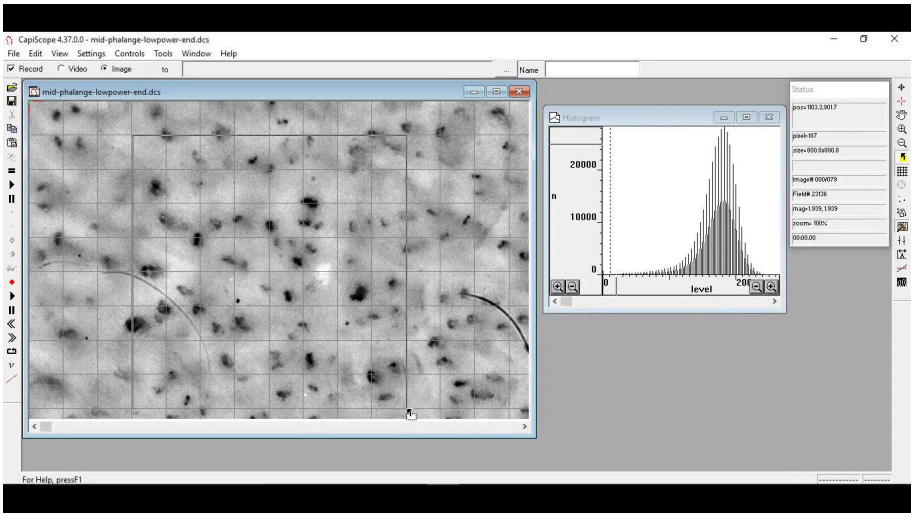
Change the grid spacing to 100um.



Draw a ROI.



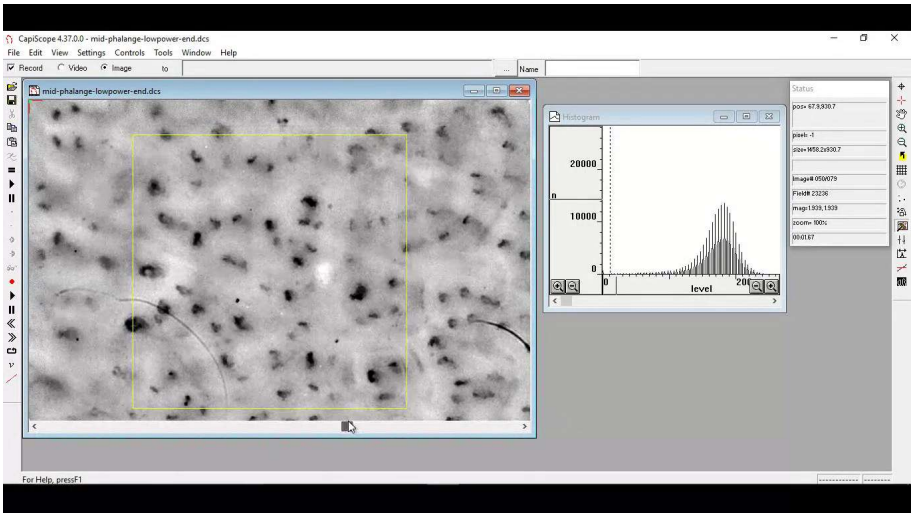
The size is shown in the size= panel in the status box



In this case we draw a ROI 800 x 800 µm

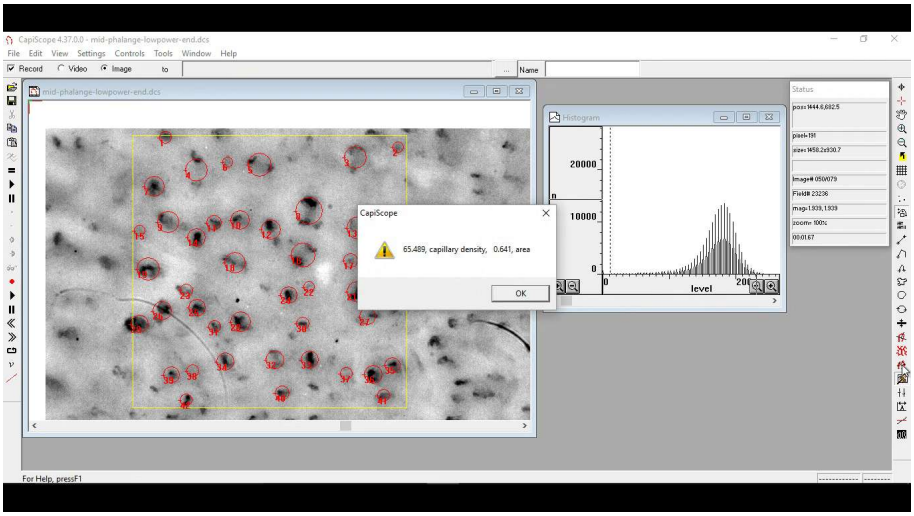
Find Capillaries

Use the horizontal scroll bar to quickly scan through and find the best image in the video



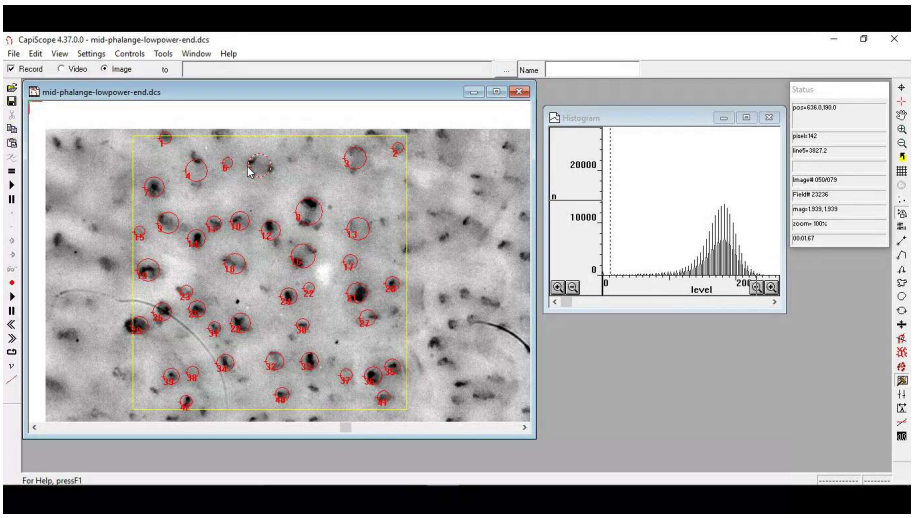
Open the Measurements toolbar buttons.

Automatically detect capillaries using the Find Capillaries function

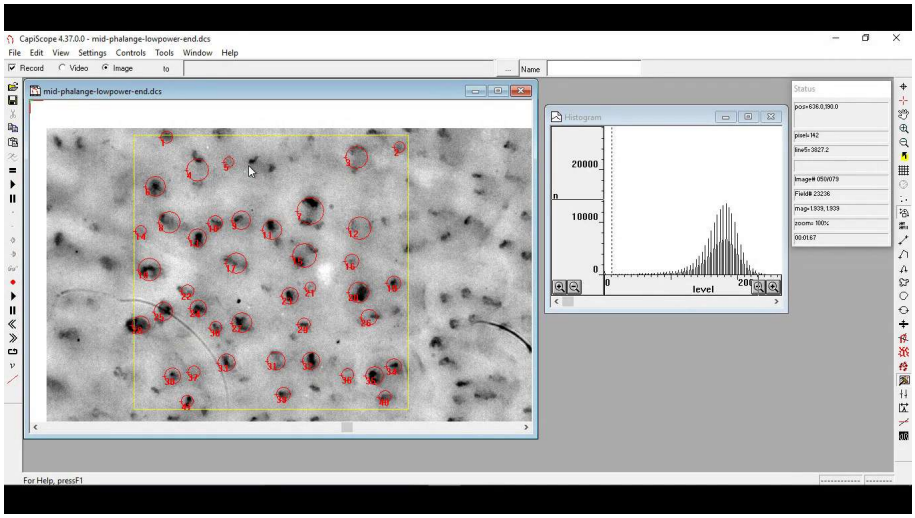


Remove any mistakes such as counting two or more closely spaced capillaries as a single capillary.

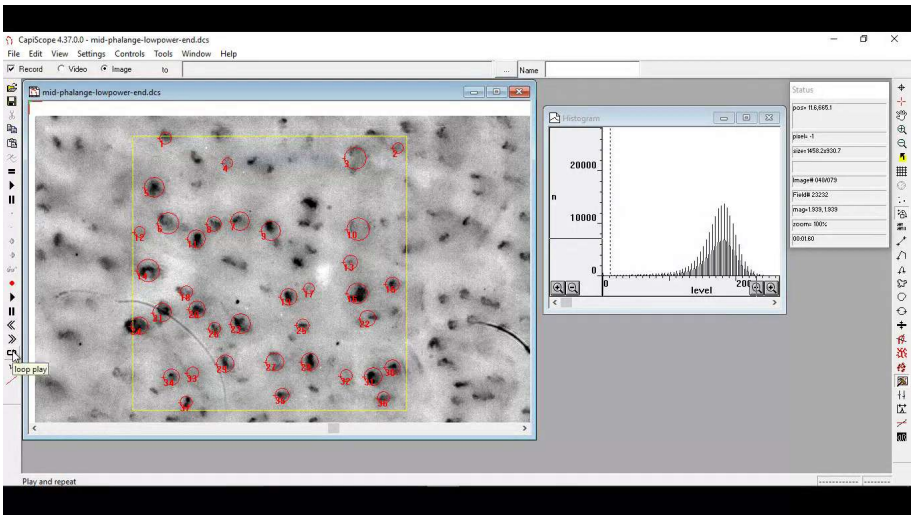
Click on the + on each circle to select it…



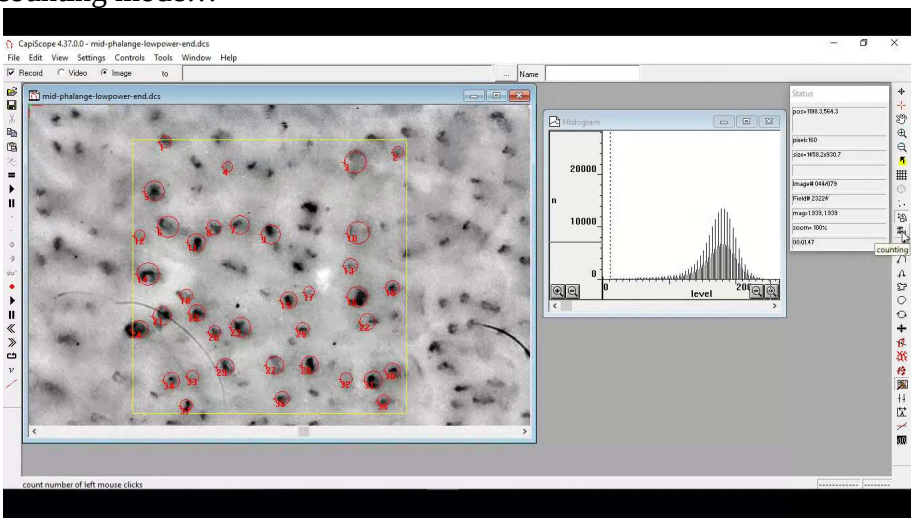
then press the Delete key to delete it.



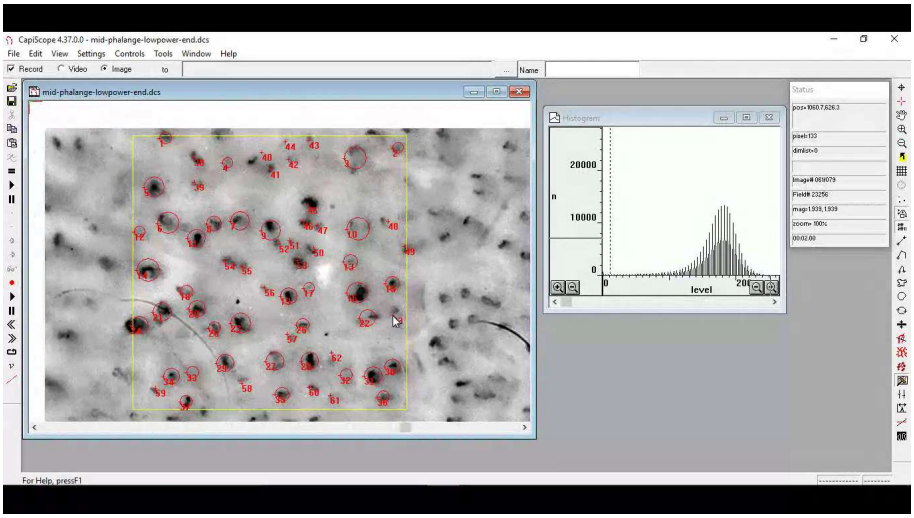
 Use the loop play button to continuously play the video whilst manually marking any missing capillaries



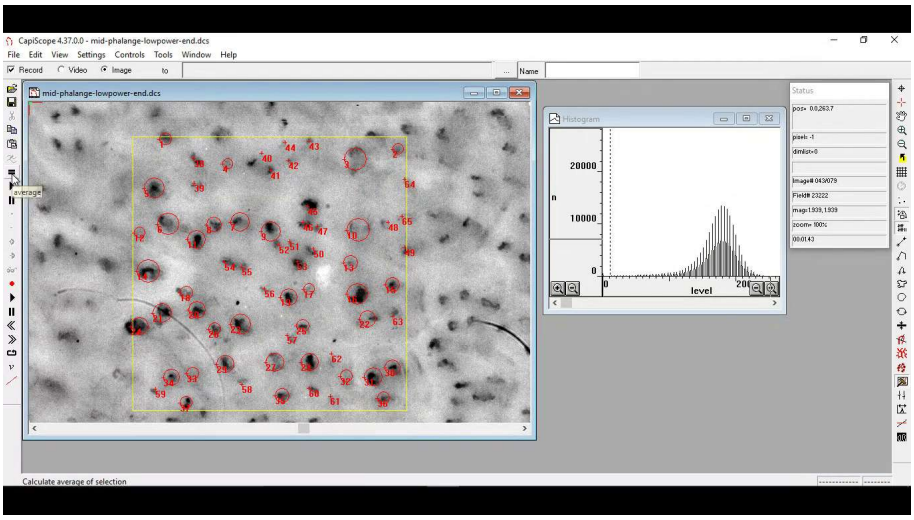
Use the counting mode…



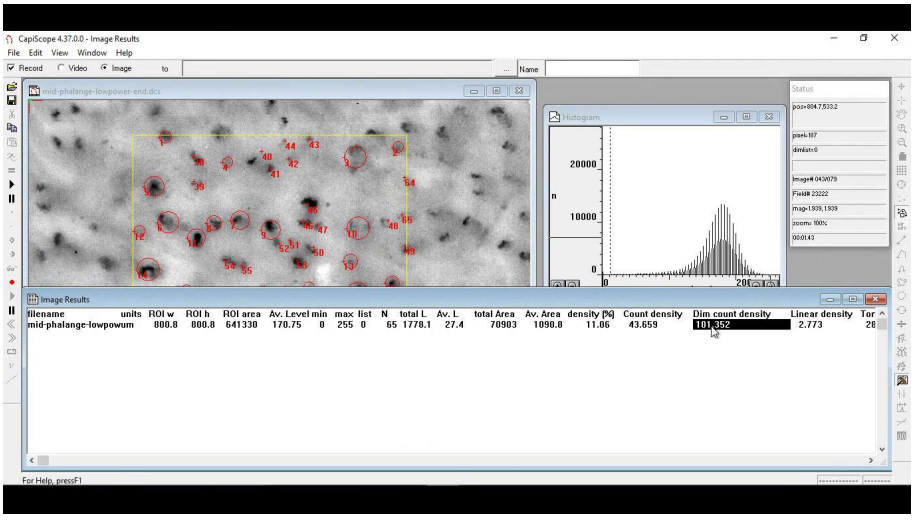
click on all unmarked capillaries.



= Use the = button or key to calculate capillary density.



This is shown in the Dim count density column, in this case 101 capillaries per mm^2



The count density column shows that 43.7 capillaries per mm^2 of the 101, were manually counted

10/05/2018