

Stain Selection Instructions

1. Start Stain Selection program.
 - a. From Python – at command prompt enter: stain_selection_gui.py press enter.
 - b. From a frozen executable – double click on xxxxx.exe
2. Press the “Select Input Image” button. Navigate to the folder with the image to be processed. Select the image.
3. The “Input Image: “ label will update to display the path to the selected image.
4. Enter the lower threshold values:
 - a. Hue: Default - 71
 - b. Saturation: Default - 56
 - c. Value: Default - 100
5. Enter the upper threshold values:
 - a. Hue: Default - 171
 - b. Saturation: Default - 156
 - c. Value: Default - 190
6. Enter Gaussian Blur (**MUST BE AN ODD INTEGER**): Default - 15
7. Enter Area Threshold: Default - 290
8. Press “Select Output Dir”. Navigate to the folder to which the results will be written. Select the folder.
9. The label “Output Dir:” will update with selected folder.
10. Press “Select Stains” button to process image.
11. Multiple Image windows will pop open while it is being processed.
12. Close image windows by placing the cursor in one of the image windows and press any keyboard key.
13. Four results files will be written to the Output Directory:
 - a. Input Image Name +_hsv.tif – a file that may be used to adjust Hue, Saturation and Value thresholds used to select stains.
 - b. Input Image Name +Contour_Data.csv – a file listing the parameters used to select stains, the number of stains found and their respective areas and perimeters.
 - c. Input Image Name +labeled-objects.jpg – an image showing the locations of the objects listed in the csv file.
 - d. Input Image Name +object-mask.jpg
14. To process the next image, press the “Select Input Image” button and repeat the above steps. If using the same values and Output Directory, then press the “Select Stains” button.