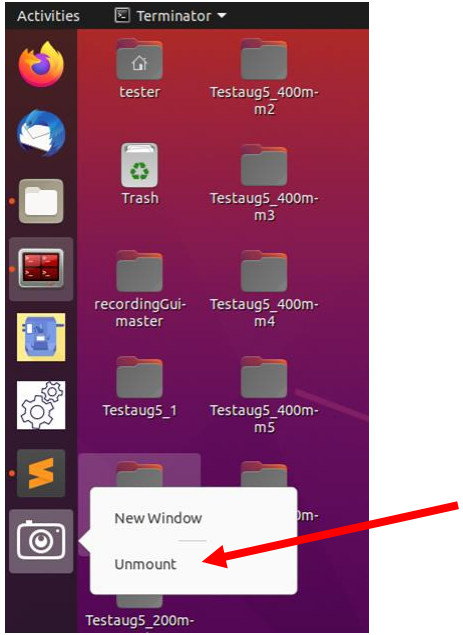
Guideline for RecordingGUI

Initial Setup

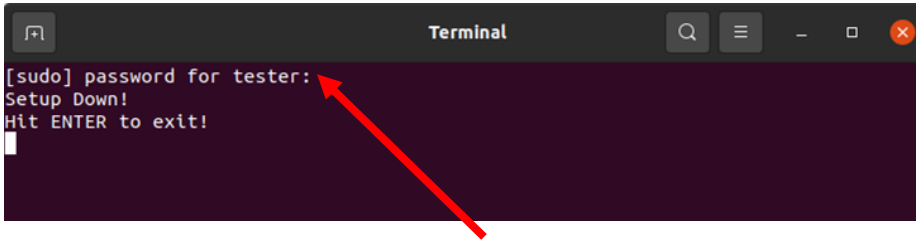


1, Turn on computer
2, Remove the lens cap from the camera and place next to computer.
3, Turn the camera on.
4, Make sure the camera is on and plugged into the computer.

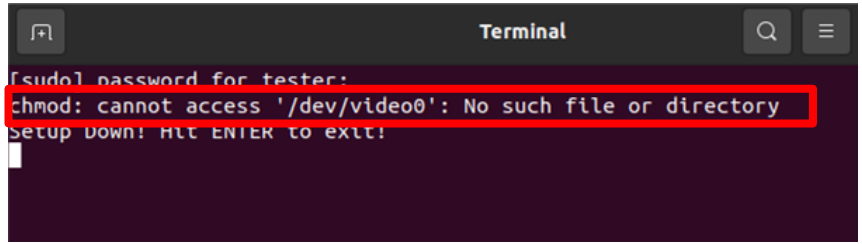
Right click the camera icon.
If “Unmount” here, click “Unmount”.
If “Mount” here, do NOT click.

Initial Setup

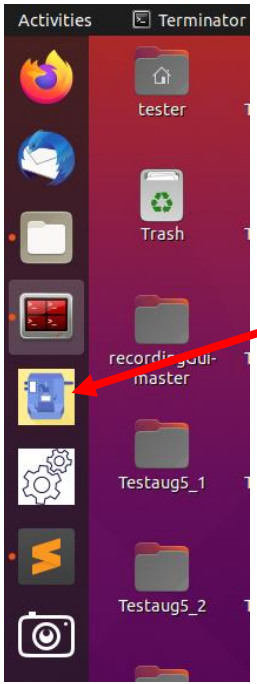
Left click this icon



Input password (nothing will show on screen).
If the output contains anything other than this (like the following).
Close this window & run setup again.



Launching RecordingGUI

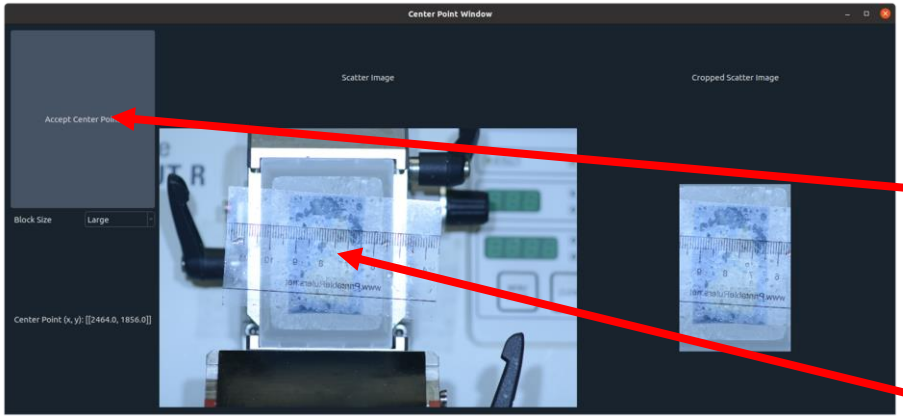


Left click this icon to open the App

Focus

Use the focus window on camera to make sure the image is in focus. Adjust the focus on the lens until the ruler linesare visible in the focus window

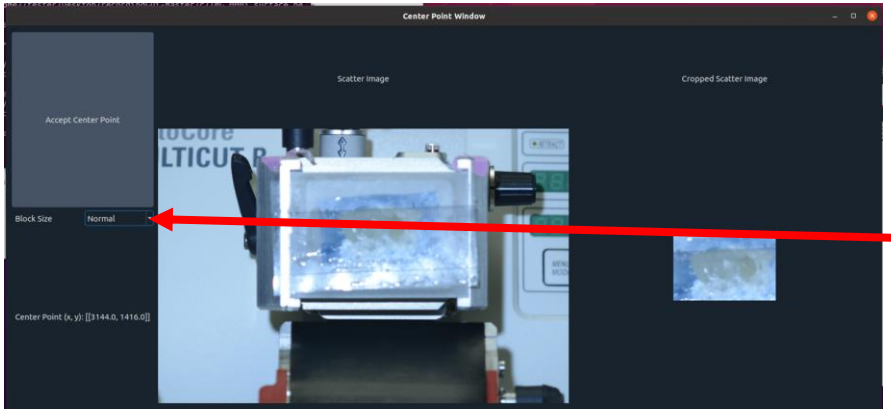
Center point



Every time you start with a new folder, the App will ask you to provide a center point.

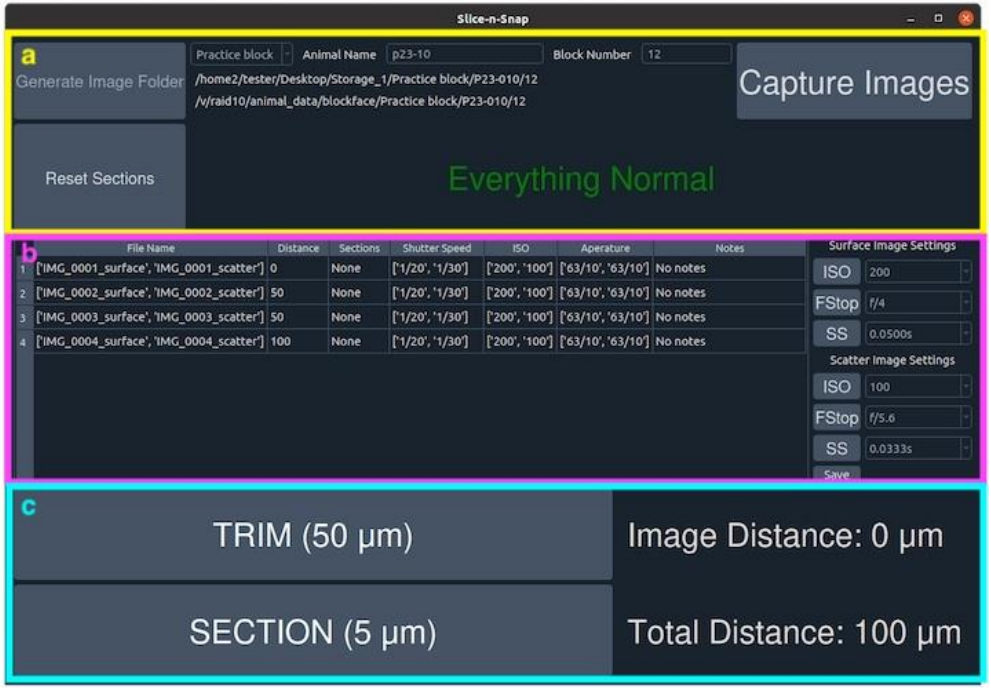
Click the button to save the result.
Do NOT use ‘X’.

Click the center point of the tissue, the result will be shown on the right side. Make sure the whole block is shown in the cropped image.



You may need to change the size when you use a small block (mouse brain).

RecordingGUI overview



a) First Section
b) Second Section
c) Third Section

RecordingGUI overview

a) This button triggers the camera to capture a surface and a scatter image corresponding to the currently logged distance.

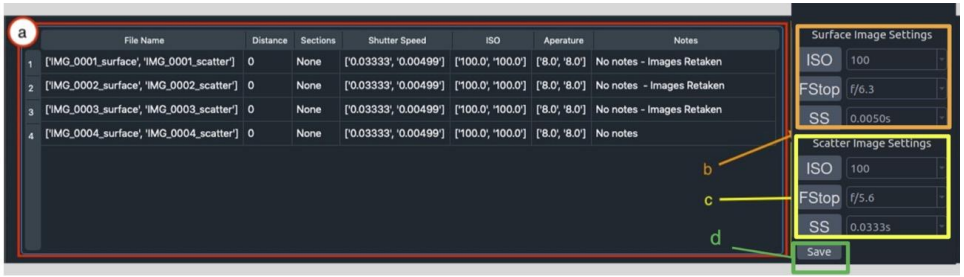
b) Input the animal name and block number in these three boxes. If your input is invalid, you will get notice in the information pane.

c) This button use the input value to generate the folder paths

d) This pane shows the generated folder paths.

e) This pane provides prompts for what actions need to be taken. Messages include prompts to select the backup and main save folders, to re-take images, and to collect sections.

RecordingGUI overview



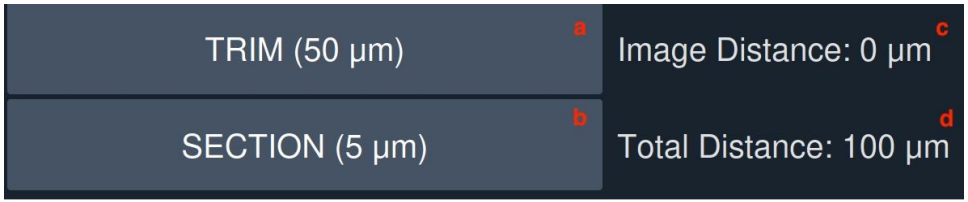
a) This table shows information for all images acquired for this tissue block, including the file names, the distance into the block, which sections each image corresponds to, camera settings, and any notes.

b) These controls display the current settings for capturing surface images. Clicking on any of the buttons enables you to select a new setting for that parameter from the corresponding drop down menu.

c) These controls display the current settings for capturing scatter images. Clicking on any of the buttons enables you to select a new setting for that parameter from the corresponding drop down menu.

d) This button saves all the camera settings and automatically loads them when you start the program next time.

RecordingGUI overview



a) This button advances the distance counter by 50 um. When it is time to capture images, the button becomes disabled and reads, “Take an image!”

b) This button advances the distance counter by 5 um. When it is time to capture images, the button becomes disabled and reads “Take an image!”

c) This indicator displays the distance that has been logged since the last image was acquired.

d) This indicator displays the total distance logged for sectioning into this block.

Image confirmation window

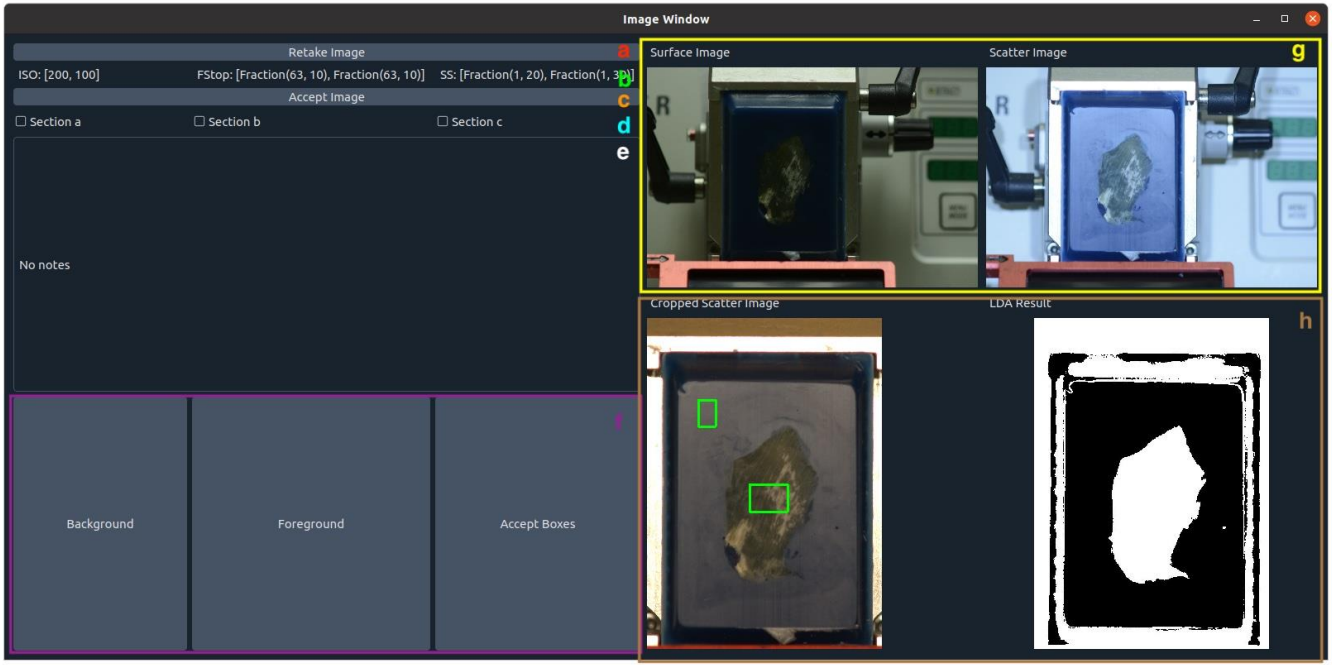


Image confirmation window

a) This button closes the image confirmation window, sets up the system to retake an image, and records that the images were retaken in the notes.

b) These columns show the ISO, f-stop, and shutter speed settings for the acquired images. The entries are in [surface, scatter] order.

c) This button closes the image confirmation window and sets up the program to continue sectioning into the block.

d) These check-boxes are for recording any tissue sections collected on slides during the last 50 um. For any set of sections, 3 sections must be collected, even if it takes more than 50um.

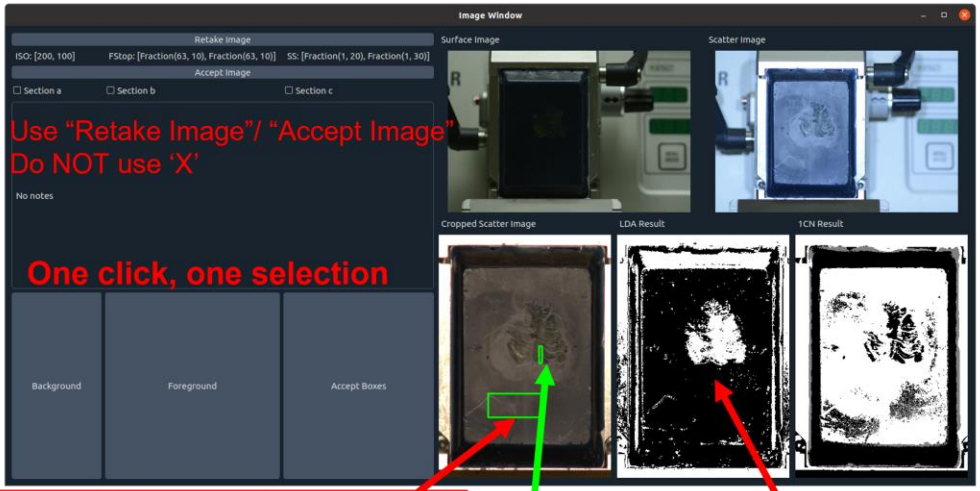
e) This text field is for you to enter any additional notes, such as anomalies and deviations.

f) These buttons are used to select regions for the segmentation method.

g) This panel shows a preview of the surface and scatter images.

h) This panel shows the cropped scatter image and its segmentation results.

Image confirmation window



Click “Background” button and then select a background area. (you can select multiple backgrounds)

Click “Foreground” button then select a foreground area.
(only the last one will be used)

Click “Accept Boxs” to check the prediction result here.
If you are not satisfied with the prediction, you can reselect the “Background” & “Foreground” and run the prediction again.
If you make some mistake & the prediction does not update after you click “Accept Boxs”, use “Retake Image” to retake the image and do the selection.