

Setup.

1 - Download Python

Go to this, and launch the downloaded installer.

<https://www.python.org/ftp/python/3.9.6/python-3.9.6-macos11.pkg>

Do what it says to install it. (should be basic and easy, if you get errors or confusing choices you can ask us)

2 - Install modules

You need to install the following modules with pip (python package installer). Do so by running the following commands in the terminal

run one of the following (whichever works):

```
pip3 install numpy matplotlib pillow tk
```

```
pip install numpy matplotlib pillow tk
```

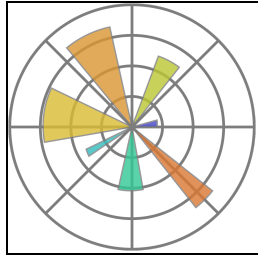
Running.

To run the program, drag the file into the terminal and press enter.

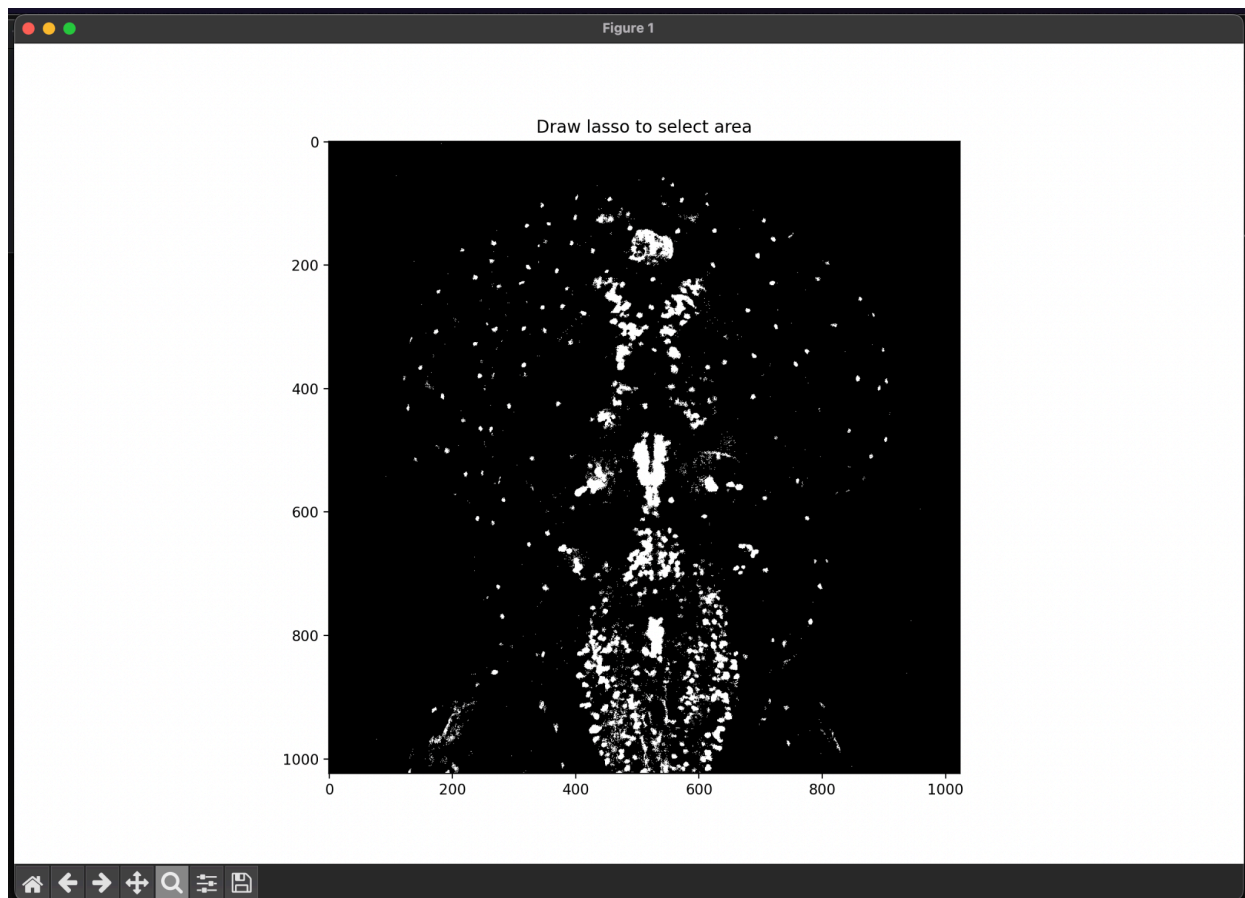
When the program runs, a python rocketship program window will open, prompting you to open a file. Select the image that you want to process, and the program will run after that.

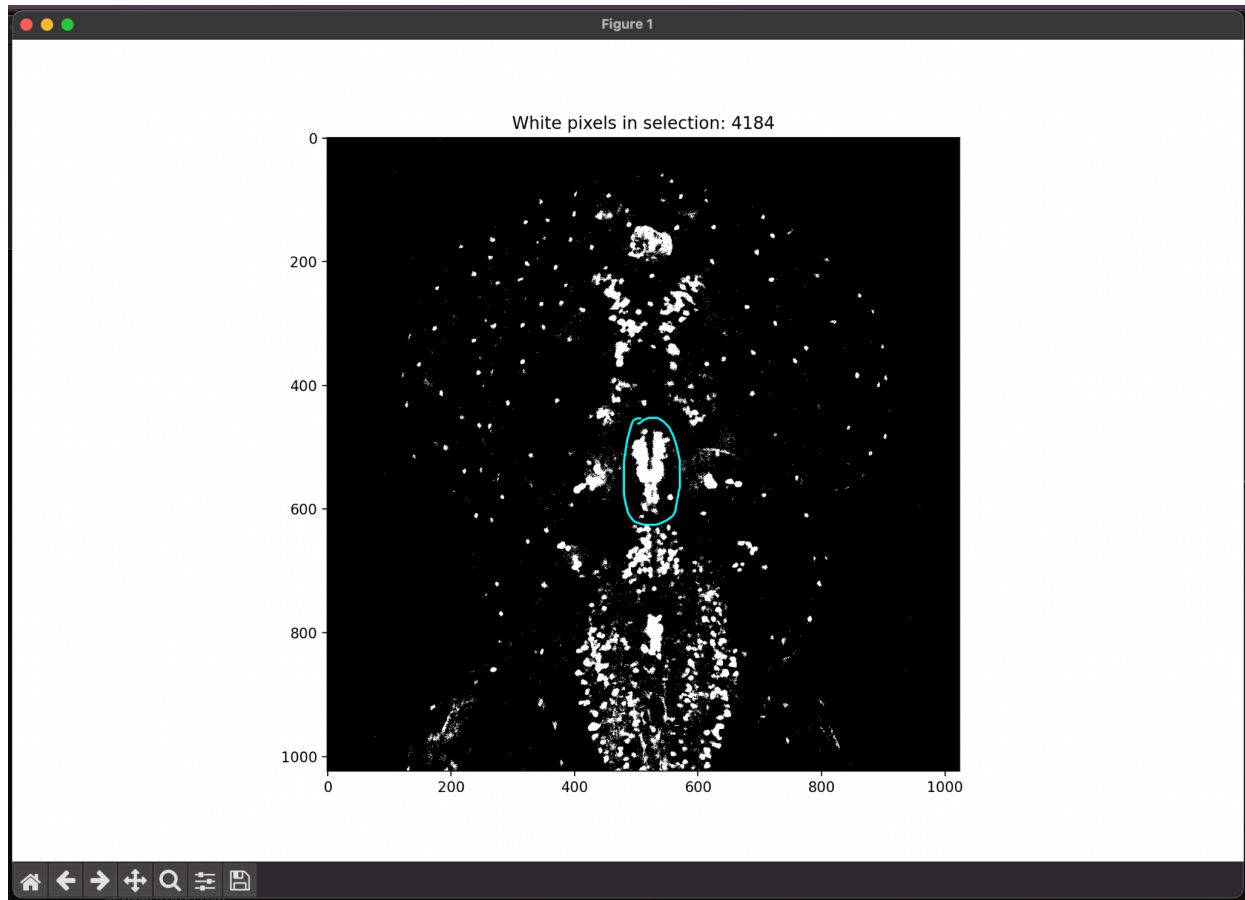


After the “rocket ship” icon resolves, the program will change to this icon, and will now work as shown below.



After clicking on the app, you can now select areas in your fish brain. Click & hold to do a lasso selection on the graph, and afterwards, the title at the top of the screen (“Draw lasso to select area”) will change to “White pixels in selection: _____.” The images shown below are a sample of what the program should look like when running.





Other Functionality:

Home Icon: Resets the image back to normal

Back Arrow: Undo button, for zooming in or moving the image (not for selection)

Forward Arrow: Redo button, for zooming in or moving the image (not for selection)

Crosshair Icon: Allows you to move the image (once zoomed in)

Magnifying Glass: Create a selection around an area, after which it will zoom in

Scales Icon: Change the bounds of the graph

Save Icon: Saves the graph, but not generally useful for anything in this case.

