

Usage Notes

Images are best viewed using ITK-SNAP:

<http://www.itksnap.org/pmwiki/pmwiki.php>

Video tutorial: <https://youtu.be/uVLqFJd4LDk>

Basic usage and viewing after installing and opening ITK-SNAP:

- **File** --> *Open main image*
 - Select 20180219_topro_average_2020.nii.gz
- To add the segmentation:
 - **Segmentation** --> *Open segmentation*
 - Select 2021-03-21_zfish_segmentation.nii.gz (or latest segmentation file)
- To add correct labels and colors to the segmentation:
 - **Segmentation** --> *Import label description*
 - Select 2021-03-21_Label_descriptions.txt (or segmentation file with date that matches the segmentation loaded in the previous step)

You can now explore the atlas in the coronal, horizontal, and sagittal planes.

To add an additional image alongside the main image loaded above (e.g., the tyrosine hydroxylase stains):

- **File** --> *add another image*
 - Select 20180505_TH_average.nii.gz (or image set of your choice)
- To view images side-by-side you may need to select the "tiled layout":
 - **Edit** --> **Layers** --> "Entered tiled layout"

- Alternatively, you can press the "\ " key to toggle between layouts

Navigating the atlas and segmentation is most easily done using "crosshair mode" (press "1") and/or "zoom/pan mode" (press "2"). These are the first two selections in the top "main toolbar" in the top left corner:

- Mouse wheel allows you to scroll through the image slices
- Right mouse click zooms in/out
- In 'crosshair mode' left mouse click changes location of the crosshair. You can see the abbreviation for the label under the cursor on the left side under "Label under cursor:"
- In 'zoom/pan mode' holding and clicking the left mouse button will allow to move the images around

Other useful commands:

- "x" will toggle the segmentation
- "c" will center the images to the location of the crosshair in all three planes simultaneously