**TeraStitcher Guide**KY 08/03/23

Scripts:   
Process\_Tera.py

This converts a .czi file into the two-tiered folder that is expected by TeraStitcher

Input:

1. Folder containing .czi file (first prompt)
2. .czi file (second prompt)
3. Output folder (third prompt)

Output:

1. Folder structure with images corresponding to relative physical position
2. Voxeldim\_[x,y,z].txt for each of the 3 dimensions of the image

Tera\_Run.sh

This automatically reads in voxel sizes from the previous script and automatically runs TeraStitcher with default settings (to get one large 16-bit stitched image)

Input:

1. Parent folder of the image (the output folder selected in the previous prompt)
2. Output folder

Output:

1. One large big tiff file

Demo

1. Create 2 folders: One destination folder for Process\_Tera.py and one destination folder for Tera\_Run.sh (usually I name them <image name\_3d\_um> and <image name\_stitched>
2. Open Process\_Tera.py in ImageJ/Fiji then Run (bottom left)
3. You will be prompted in order for: a) source folder b) source file c) destination folder
4. ImageJ will now save images into the correct location (but may take some time
5. Once the three voxel size .txt files have been written (voxeldim\_[x,y,z].txt), all images in the .czi have been written to their correct locations and you can move forward
6. Open Tera\_Run.sh in notepad and change the following the paths under the i/o folders block then save and close (you should not need to change anything else)
7. In powershell (or terminal on mac) run Tera\_Run.sh by typing: bash <location of Tera\_Run.sh>
8. This should start the process of stitching

Notes

1. Before starting, you may need to add terastitcher to your path (or uncomment the install portion of Tera\_Run.sh)
2. \*\*\*\*usually the merge process has an error that can be ignored, but you must click ignore in order to bypass it and continue the stitching process\*\*\*\* (WIP)
3. This requires that your tiles are at least 2x2 tiles