

## z\_project\_max\_MM.ijm

The macro runs the following process:

1. Generate and save the z projection (max) images from the images acquired from the micro-manager on GH CSU-W1

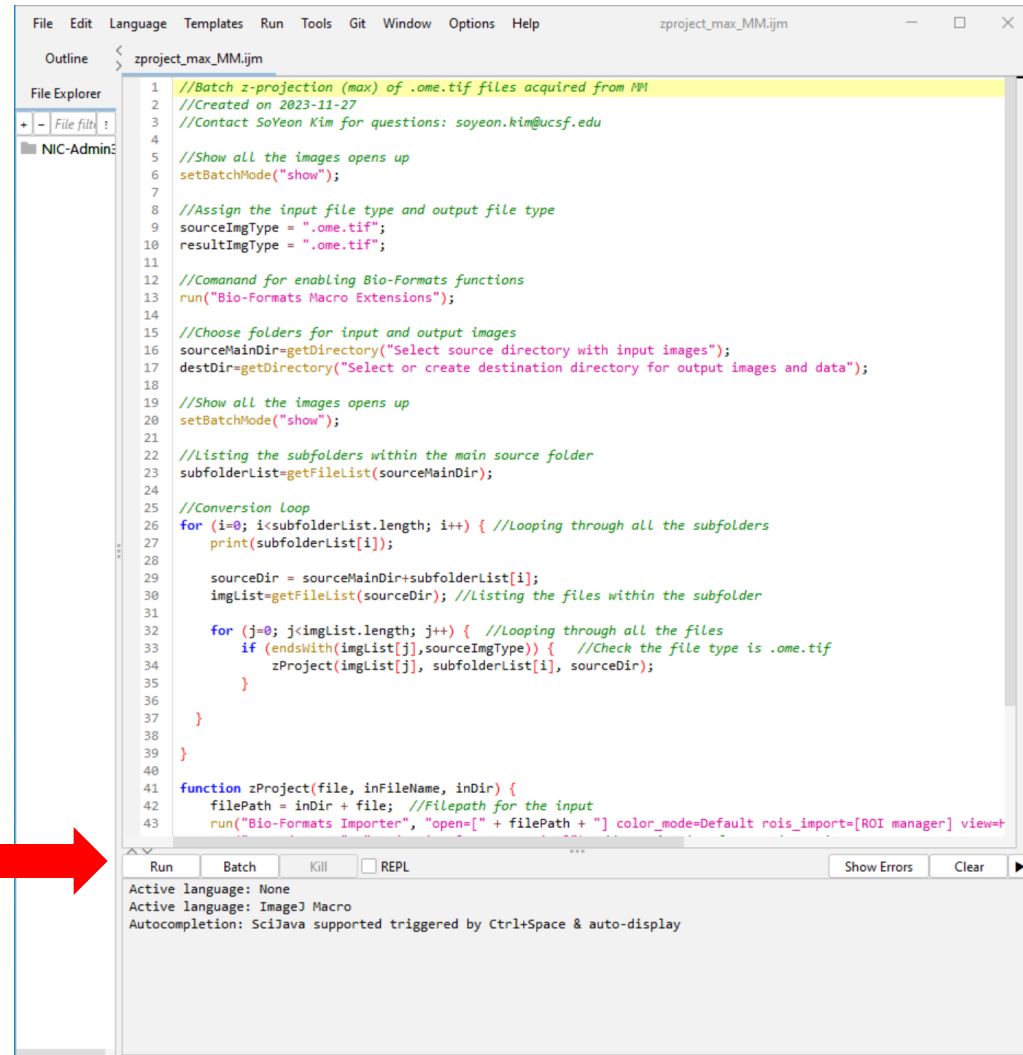
The macro needs the following:

1. Raw images acquired from the Micro Manager

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**Step1:** Drag and drop on the main FIJI/ImageJ window

**Step2:** Click 'Run' button



```
1 //Batch z-projection (max) of .ome.tif files acquired from MM
2 //Created on 2023-11-27
3 //Contact SoYeon Kim for questions: soyeon.kim@ucsf.edu
4
5 //Show all the images opens up
6 setBatchMode("show");
7
8 //Assign the input file type and output file type
9 sourceImgType = ".ome.tif";
10 resultImgType = ".ome.tif";
11
12 //Comanand for enabling Bio-Formats functions
13 run("Bio-Formats Macro Extensions");
14
15 //Choose folders for input and output images
16 sourceMainDir=getDirectory("Select source directory with input images");
17 destDir=getDirectory("Select or create destination directory for output images and data");
18
19 //Show all the images opens up
20 setBatchMode("show");
21
22 //Listing the subfolders within the main source folder
23 subfolderList=getFileList(sourceMainDir);
24
25 //Conversion loop
26 for (i=0; i<subfolderList.length; i++) { //Looping through all the subfolders
27     print(subfolderList[i]);
28
29     sourceDir = sourceMainDir+subfolderList[i];
30     imgList=getFileList(sourceDir); //Listing the files within the subfolder
31
32     for (j=0; j<imgList.length; j++) { //Looping through all the files
33         if (endsWith(imgList[j],sourceImgType)) { //Check the file type is .ome.tif
34             zProject(imgList[j], subfolderList[i], sourceDir);
35         }
36     }
37 }
38
39 }
40
41 function zProject(file, inFileName, inDir) {
42     filePath = inDir + file; //Filepath for the input
43     run("Bio-Formats Importer", "open=[" + filePath + "] color_mode=Default rois_import=[ROI manager] view=+
```

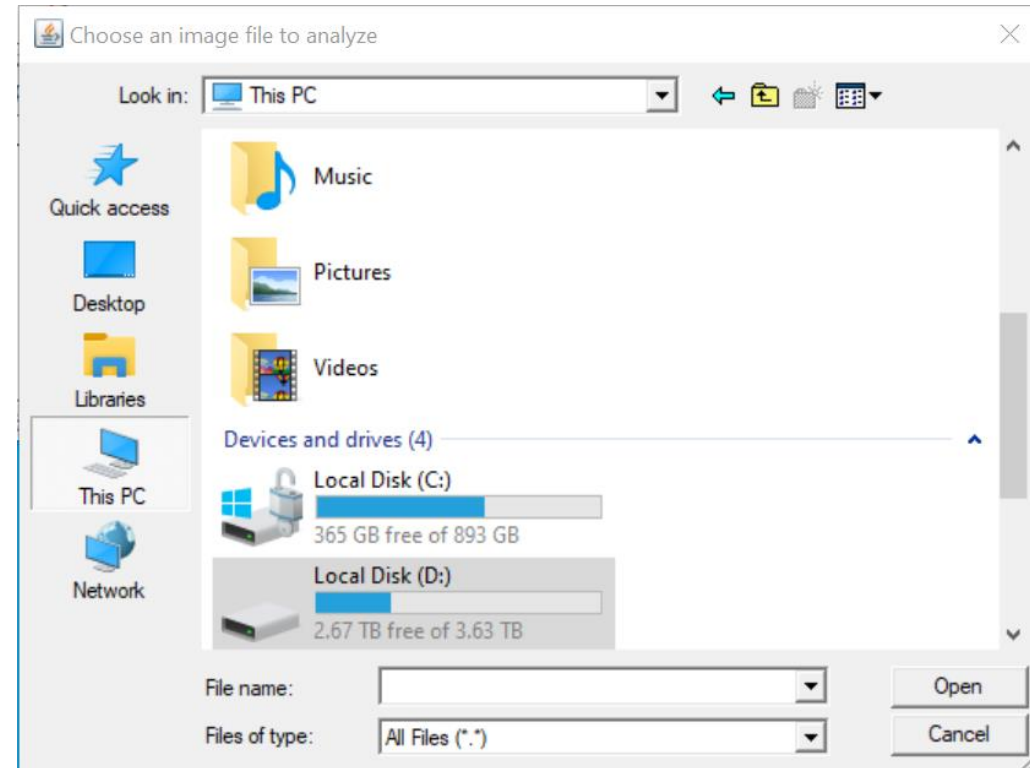
Run Batch Kill REPL Show Errors Clear

Active language: None  
Active language: ImageJ Macro  
Autocompletion: Sciljava supported triggered by Ctrl+Space & auto-display

**Step3:** Choose the folder that contains all the image folders generated by MM

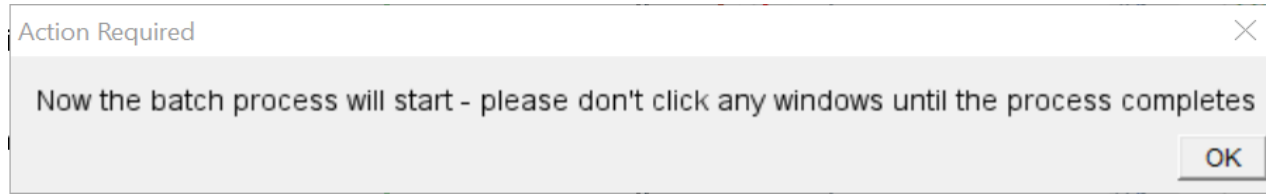
**Step4:** Choose the folder for the resulted image files

\*Please do not interrupt the process by clicking the windows



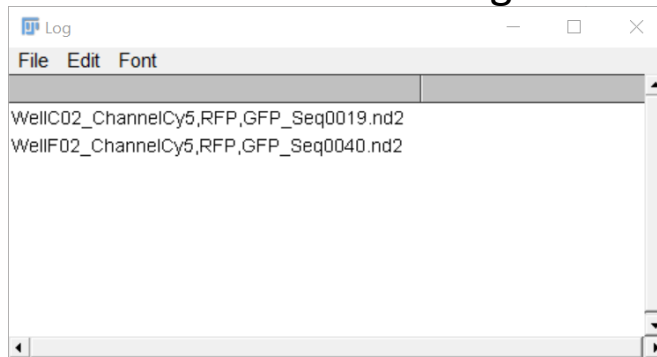
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**Step5:** Pop-up message for starting the batch process – usually it's better to leave the computer running without interruption



**Step6:** The macro will run the following tasks. The status will be updated on the Log window

- Open the images
- Z-projection of the images
- Save the resulted images



**Step7:** Pop-up message when the batch process finishes

