

CellShaper Quick User's Guide  
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### 1. Installation.

Download CellShaper from <http://www.achucarro.org/downloads> (CellShaper), unzip, and save the CellShaper folder to the Fiji plugins folder.

We have detected some problems with the most recent versions of Sholl Analysis plugins. Thus, we recommend also to install the version of the Sholl Analysis plugin provided. To install this version delete the current version of the Sholl\_Analysis plugin from the Fiji plugins folder (Sholl\_Analysis-X.X.XX.jar) and copy and paste the one provided (Sholl\_Analysis-3.6.13.jar). You should avoid updates that may re-install the most recent version of Sholl\_Analysis plugin.

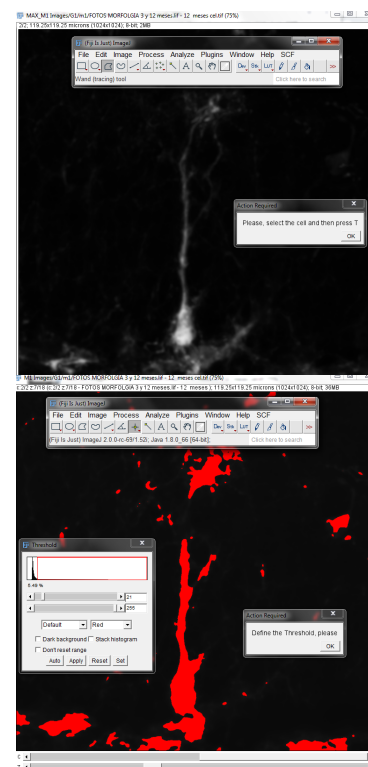
### 2. Prepare folders.

- 2.1. Create a folder named "M1 Images"\*.
- 2.2. Create a folder per experimental group inside "M1 Images".
- 2.3. Create a folder per individual experiment/animal inside the folder of the experimental group, and place inside your images (please use single images files).

\*You may also use the "Folders example" provided with the CellShaper pack.

### 3. Macro 1 (M1\_CellShaper).

- 3.1. Open Fiji and access M1\_CellShaper by clicking on the Plugins menu and then on the CellShaper submenu (Plugins > CellShaper > M1\_CellShaper).
- 3.2. Select the folder containing the subfolder "M1 Images". and click OK.
- 3.3. Select a cell in the image.
- 3.4. Add selections to the ROI manager by pressing the letter "t".
- 3.5. Select the center of the cell soma/nuclei in the image.
- 3.6. Add selection point to the ROI manager by pressing the letter "t".
- 3.7. Click OK in the window "Action Required".
- 3.8. Define the threshold using the Threshold window (your cell should be on red).
- 3.9. Click OK in the window "Action Required".
- 3.10. A new window will appear asking if you want to analyze another cell from the same image, proceed as you wish.
- 3.11. Repeat steps 3.3 to 3.11.



### 4. Macro 2: (M2\_CellShaper).

- 4.1. Open Fiji and access M2\_CellShaper by clicking on the Plugins menu and then on the CellShaper submenu (Plugins>CellShaper>M2\_CellShaper).
- 4.2. Select the folder containing the subfolders "M1Processed Images" and "M1 ROIs".
- 4.3. The macro will analyze the images using previously defined selections and thresholds. Result tables will be stored in a new folder named "M2 Results".