NEUROI BunwarpJ feauture

Graphical user interface

Description automatically generated

Starts a trialstack view from a specific transformation. You can scroll through the anatomy images with rois overlayed. **You can start multiple ones and compare different transformation**

SIFT option: automated landmark calculation for BUnwarpJ.

Reference trial for the transformation calc. You need the roi file for this trial in the roi folder

BUnwarpJ section in the lower right corner of neuroi

Normalization of intensities/contrast

Transformation Name

Text

Description automatically generated

In case the name is of the calculated transformation is not enough information: just put the mouse over the name and you will see the parameters.(they are also shown in the trialstack view)

Graphical user interface

Description automatically generatedGraphical user interface, text, application, chat or text message

Description automatically generatedTable

Description automatically generatedGraphical user interface

Description automatically generated

During calculations an additional folder “BUnwarpJ” is created in the “result” folder. Each calculated transformation has its own folder containing:

Roi.mat : transformed rois

transformationParameters.mat: All transformation parameters

Folder “plane0X” containing the “Transformation” and “TransformationRAW” plus the new anatomy tiffs if “Histogram equal” or “CLAHE” was used.

**Need to be changed in CalcAndApplyBUnwarpJ**

javaaddpath('C:\Users\eckhjan\fiji-win64\Fiji.app\plugins\bUnwarpJ\_-2.6.13.jar');

javaaddpath('C:\Users\eckhjan\fiji-win64\Fiji.app\jars\ij-1.53f.jar');

javaaddpath('C:\Users\eckhjan\fiji-win64\Fiji.app\plugins\mpicbg\_-1.4.1.jar');%for SIFT

javaaddpath('C:\Users\eckhjan\fiji-win64\Fiji.app\jars\mpicbg-1.4.1.jar');%for SIFT

These are the “initial Deformation” (grid start) and “final Deformation” (grid end). Numbers (starting at 0) corresponds to very coarse/coarse/fine/very fine etc. in the Fiji plugin. The higher the bottom number the more warping you will get in the rois. Landmarks weights and image weights are adjusted depending on if SIFT is used. We could add all parameter for the user. https://imagej.net/plugins/bunwarpj/

CLAHE parameters. It might be good to increase the NumTiles

Check out https://imagej.net/plugins/clahe

These are the SIFT parameters. Check out https://imagej.net/plugins/feature-extraction