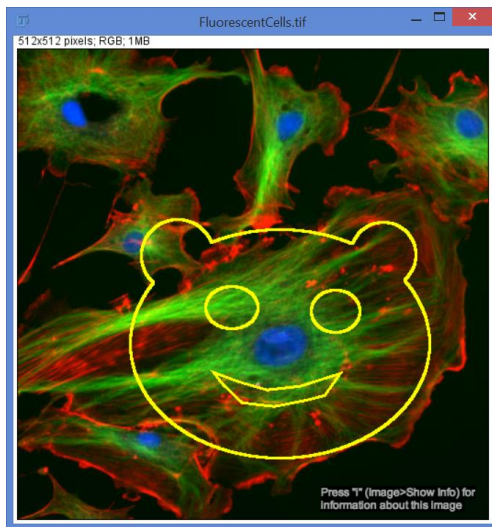


Exercises Session 3 – Simple measurements in Fiji

Exercise 6) Draw a teddy bear's face on an image. (5 mins)

- Open Samples: FluorescentCells.tif (**File / Open Samples >**)
- Use circle and polygon selection tools.
- Hold shift to add to an ROI. Hold Alt to remove from an ROI.
- This allows you to make composite ROIs.



Exercise 7) Measure Nuclei size and intensity in HelaCells.tif (15 mins)

- Open the HelaCells.tif sample image (**File / Open Samples >**)
- Use magic wand to select each nucleus. (Select the wand, click on a nucleus then Double click on the Wand tool to change the tolerance)
- Use ROI manager to save each nuclei ROI (press T).
- Set measurements. **Analyze / Set Measurements...**
- Measure the Nuclei.
Shortcut = 'M', or use Measure in ROI manager, or More>> Multi Measure

Exercise 8) Be careful when measuring stacks as Z-projections (5 mins)

- Run this macro from the course Macros folder:
StackMeasureMaxvAvevSum.ijm
- To run this macro, drag and drop on Fiji, Press 'Run' in the new text / macro window.
- Move the windows so you can see them all.

The ROI manager has 5 ROIs that were measured.

This macro opens a sample image, flattens the green channel Z-stack into a single image in 3 ways (Maximum, Average & Sum projections) and measures 5 ROIs on each image, then plots the results.

Windows are:

Original Image, the z-stack of just Ch2, and Ch2 flattened (projected) as Maximum, Average and Sum.

Why are the values from the MaxP, AveP and SumP different?

