

Recommended Software

Instructions for the Leica upright fluorescence scope with IDS 3260 camera

Room 310 ICH

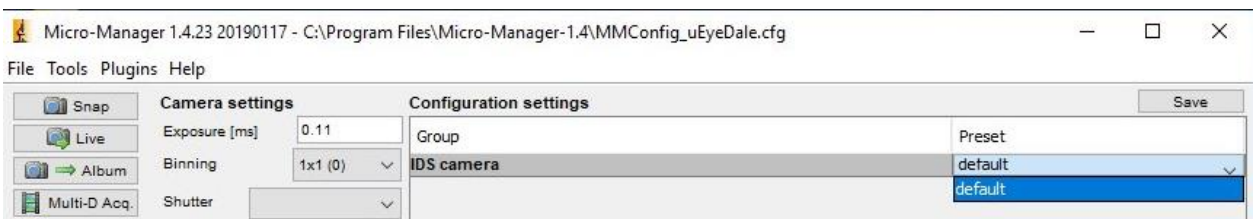


Start up:

Run the Micromanager software (shortcut on desktop)
Load the startup configuration for the IDS camera (uEyeDale).



Then choose the default configuration:



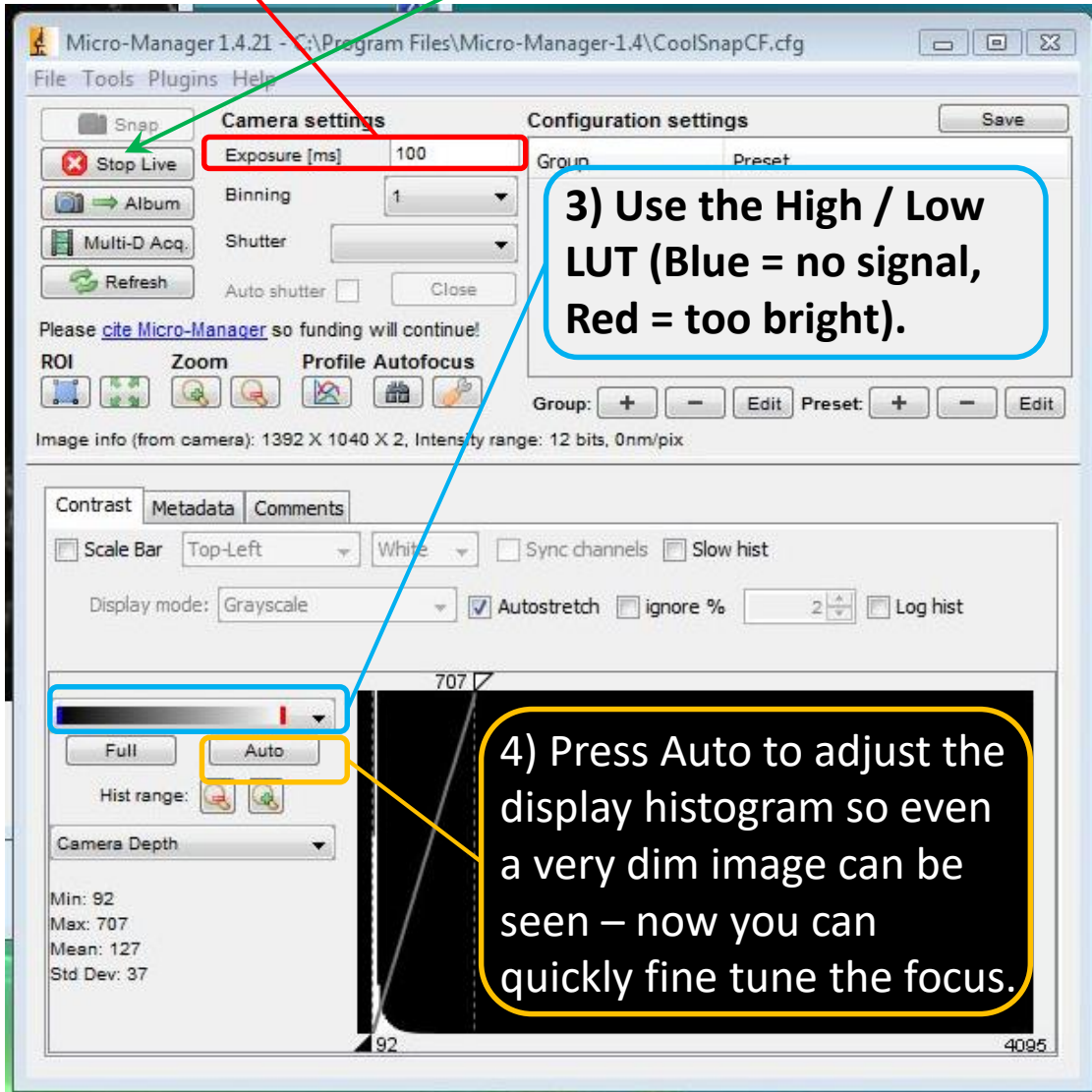
Capture each channel:

1) Set the exposure time (use a short exposure to focus, say 100-200ms).

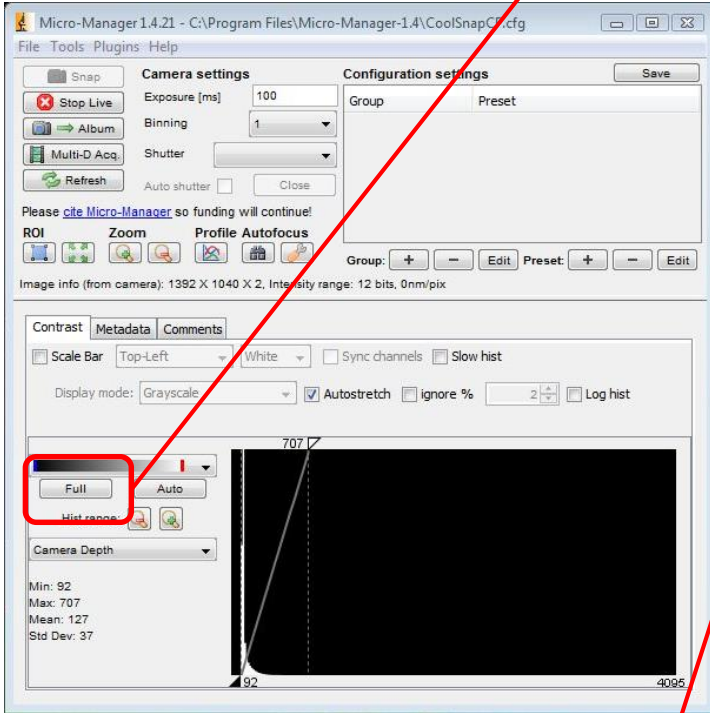
2) Press Live to open the Snap/Live image window

3) Use the High / Low LUT (Blue = no signal, Red = too bright).

4) Press Auto to adjust the display histogram so even a very dim image can be seen – now you can quickly fine tune the focus.



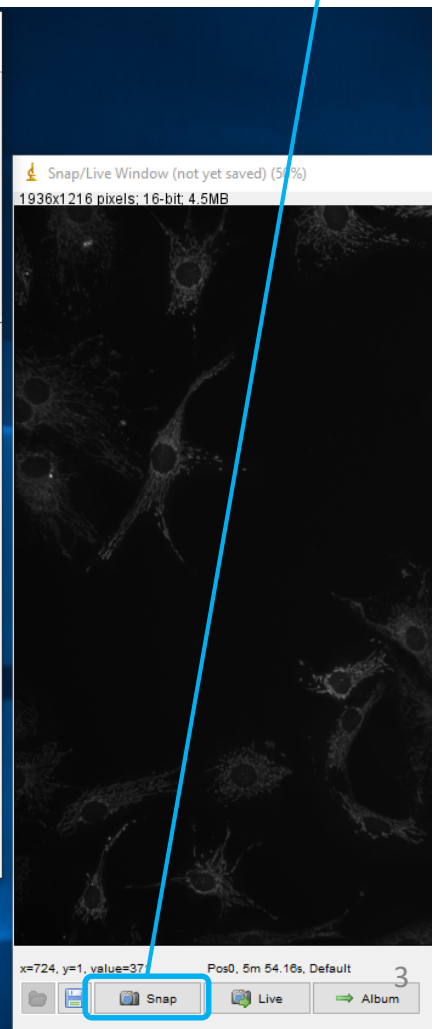
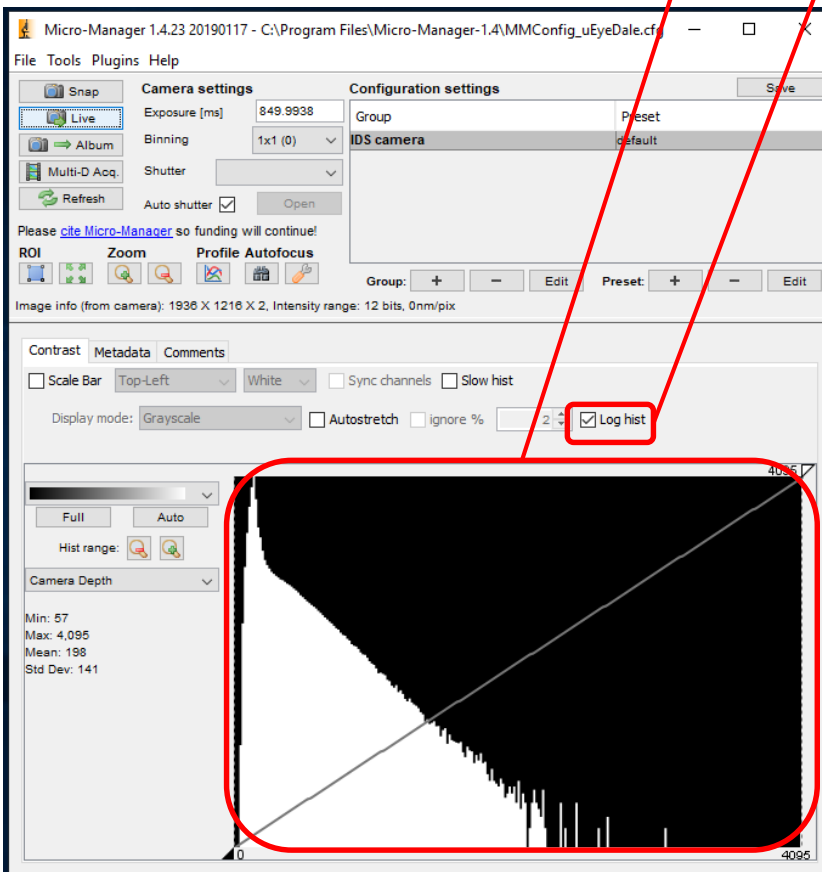
Once you have good focus, set the LUT display to full, and increase the exposure time.



Aim for an exposure time that 2/3rds fills the histogram, so that your brightest pixel is below the maximum brightness of 4095.

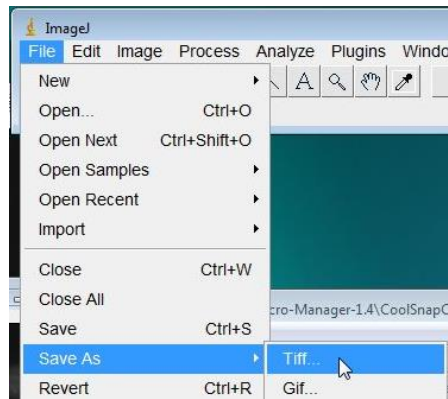
Check the log button is selected to make the histogram easy to read.

Then press Snap.

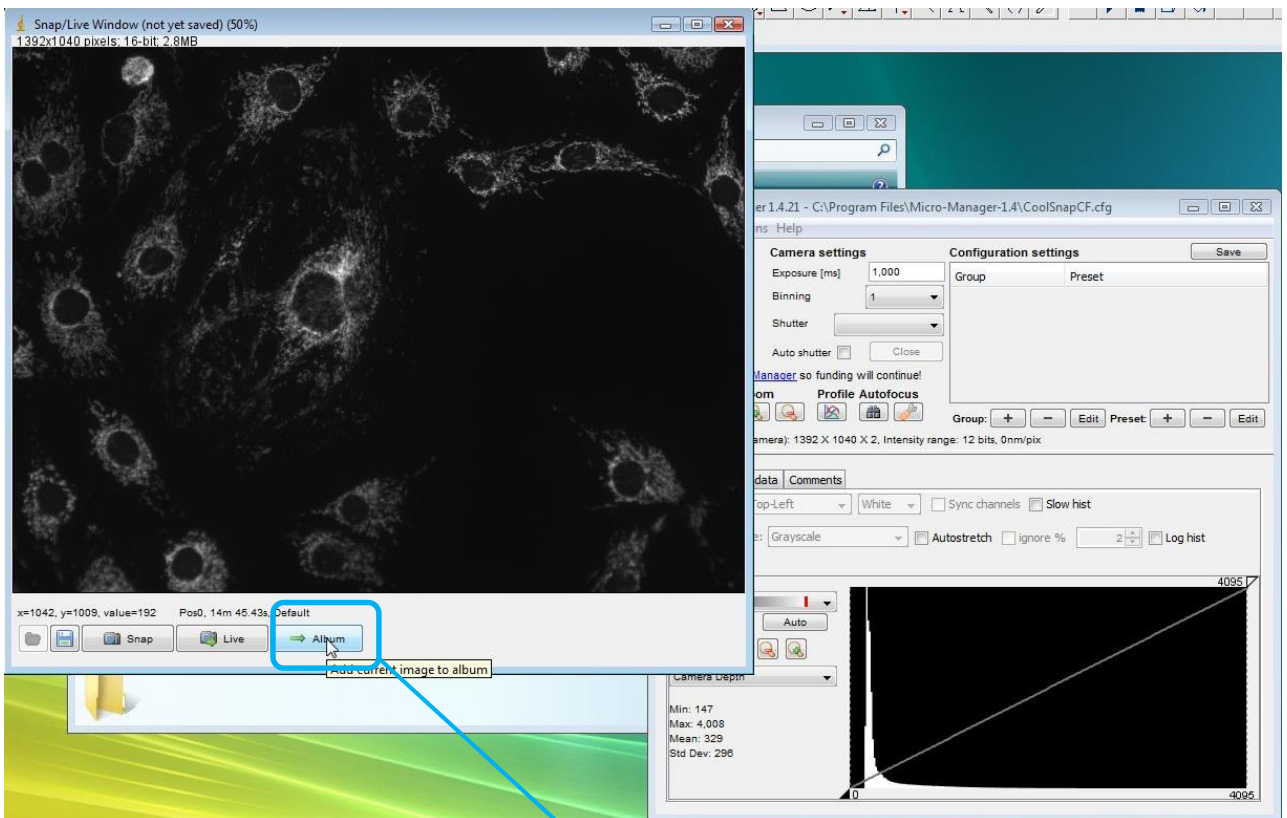


You can save your images one at a time.

Go to the main ImageJ window, then File / Save As / TIFF...



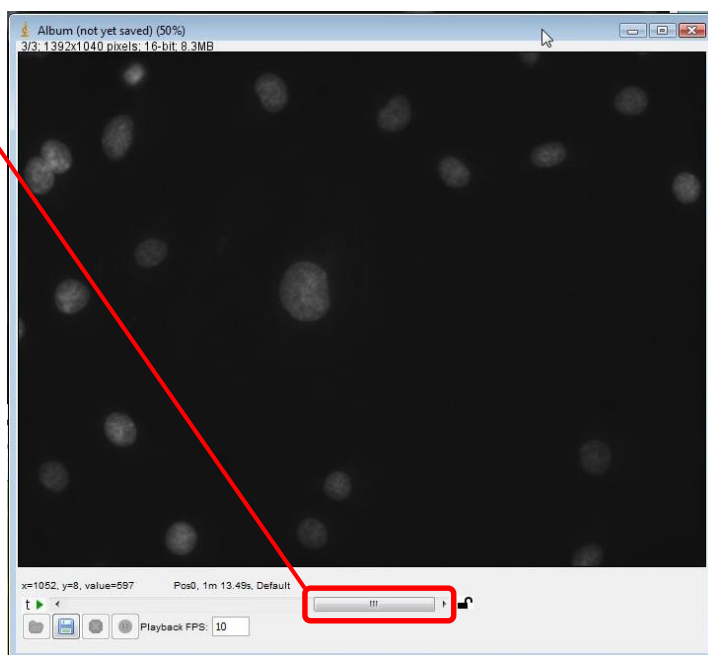
Or make 2 or 3 channel stacks:



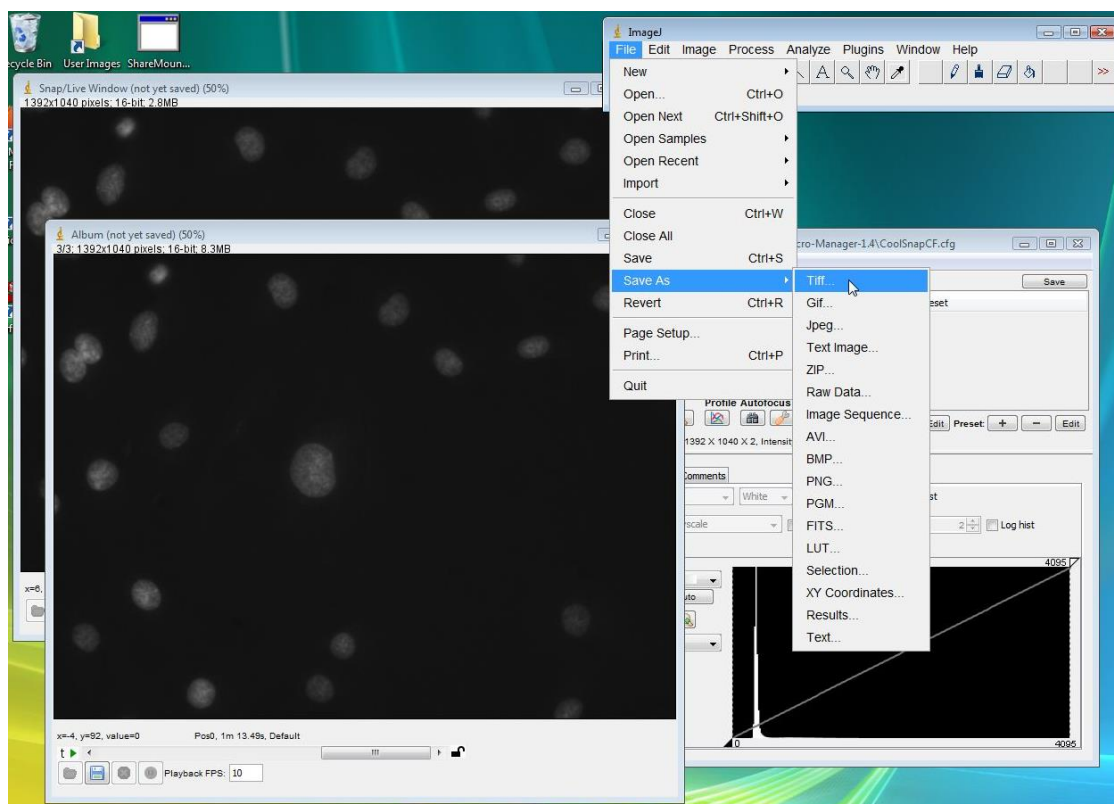
After snapping the image, press 'Album', a new Album window opens, with your image as the first channel of a multichannel stack.

Next, switch the scope to your next channel, adjust the exposure time and focus if needed, and Snap the next colour channel. Press Album, and your second channel is added to the Album.

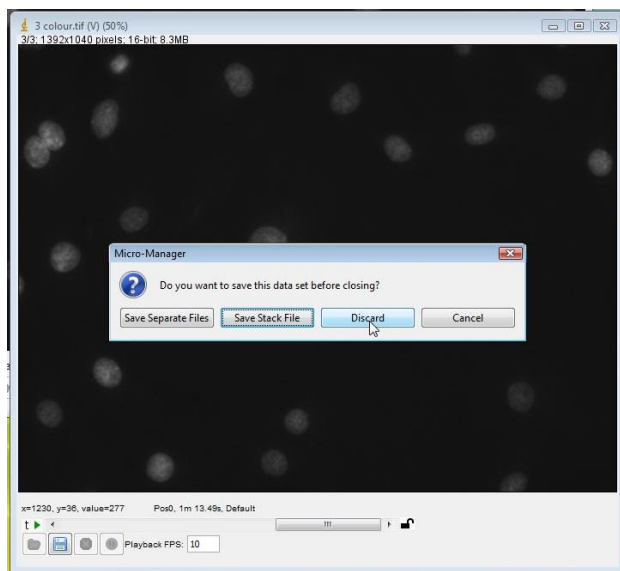
Here is an Album with 3 channels (only the 3rd channel is visible). The slider at the bottom of the window will switch between channels.



To save a 2 or 3 channel stack, select the Album window then go to the ImageJ window and save as a tiff...



Then close and discard the album window and take your next set of images.



You can open the 3 channel image in ImageJ, then make it a 3 colour composite...

