Olympus Light Microscope BX 63 Instruction

1. Turn on microscope
   1) Turn on main switch of mercury lamp-X-Cite
   2) Turn on main switch of control box BX3-CBH
   3) Turn on main switch of control box BX3-SSU
   4) Turn on main switch of touch panel controller
   5) Turn on shutter controller (black box), make sure the switch is in auto position
   6) Turn on PC and open Cellsens software

2. Load sample

Load sample on the sample stage

3. Imaging:
   1) Choose imaging mode on the software: BF, DIC, TRITC, FITC, DAPI, etc.(If you use DIC imaging, you have to push in the DIC filter on the bottom of the stage)
   2) Choose the object lens on the software: 4X, 10X, 20X, 40X, 60X
   3) Click on

8) Click the Snapshot icon button to capture an image
   a. Save your image under the user folder on the desktop or in your personal device (if you have scale bar on your images, when you save the images as .tiff, the images will have two layers; when you save the images as .jpg, the images will only have one layer)

4. Movie recording
   1) Select Movie recording
   2) Click movie icon button to capture a movie
   3) Save your movie .avi file under the user folder on the desktop or in your personal device

5. Process set up
   1) On the right set of the software screen, select process management window
   2) Set up channel selection
   3) Set up Z stack condition if needed
   4) Set up XY stage capture condition if needed
   5) Set up time lapse capture condition if needed

6. Experiment set up
   1) On the right set of the software screen, select experiment management window
   2) Open the saved experiment or establish a new exp.31 (im)21.3 (e)3.6 (nt)]TJ

Set up XY

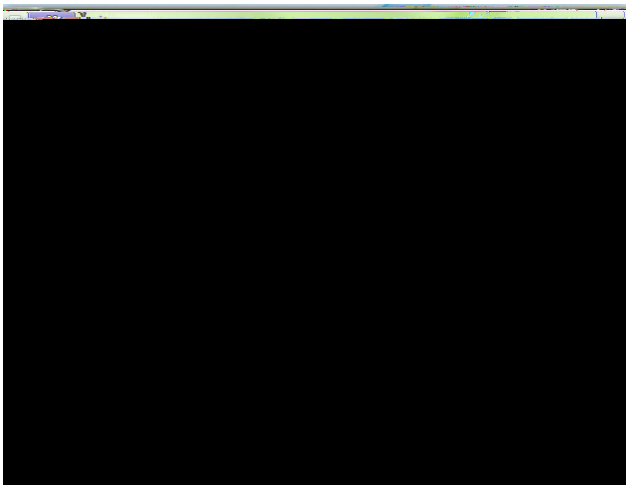
Set up time

5) Turn off main switch of control box BX3-SSU
6) Turn off main switch of control box BX3-CBH
7) Turn off main switch of mercury lamp-Xcite

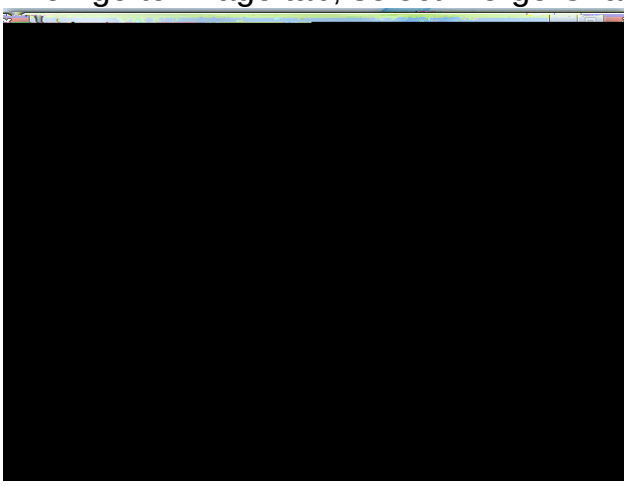
Note: The experiment or process file will automatic saved under E:/user/temp as .vsi file. To view the images in the experiment or process file. The .vsi file can be open in ImageJ by following instruction http://imagej.net/OlympusImageJPlugin.
Or open the .vsi file in Cellsens software, then under file, select export to export all the images in a folder as .tiff files.

How to open .vis file images in ImageJ in correct color:

1. Download and install Olympus viewer plugin from http://imagej.net/OlympusImageJPlugin



4. Then go to Image tab, select Merge Channels



5. Switch C1 to (blue) and C3 to (red) channels (see below), then click OK.

6. Final step, go to Color, select stack to RGB. At this point, the images should be in the correct color. Then save the new correct color image file.