Cytocam Fluorescence Module - User Guide

● This module is for use with monochrome cameras and colour cameras in mono mode used in fluorescence imaging.

● This guide explains the additional functions of the fluorescence module. For detailed instructions on camera settings please see the Cytocam User Guide.
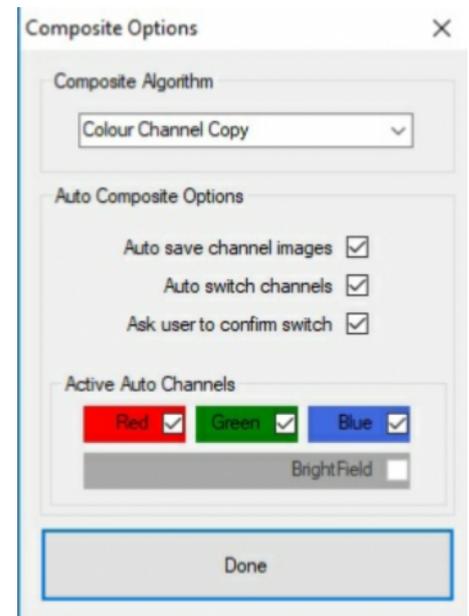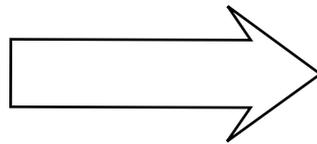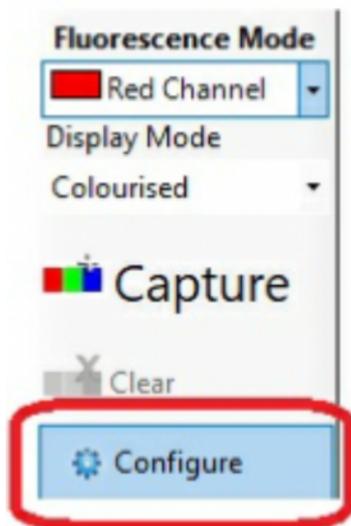
Capturing a single colour:

1. Select the colour channel (e.g. Green Channel) and choose if you want the image "Colourised" or "Raw Greyscale" in the DISPLAY MODE dropdown.
2. Adjust the camera parameters as required (e.g. frame rate, exposure, gain, gamma etc).
3. Choose your desired image file format under SAVE OPTIONS (jpeg or tiff).
4. Press CAPTURE SNAPSHOT AS…
5. Navigate to your desired save folder and type in the image filename.
6. The next time you press CAPTURE SNAPSHOT AS… it will open the last save location.

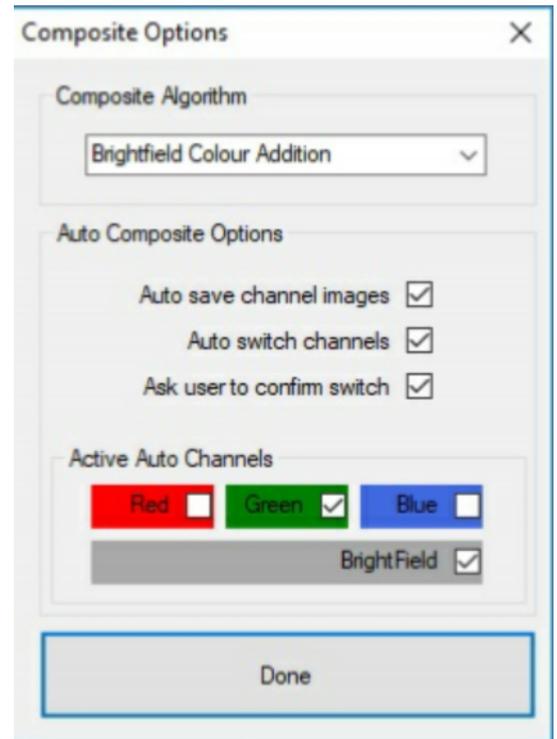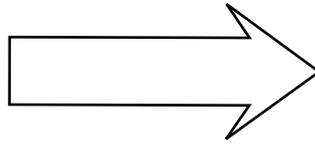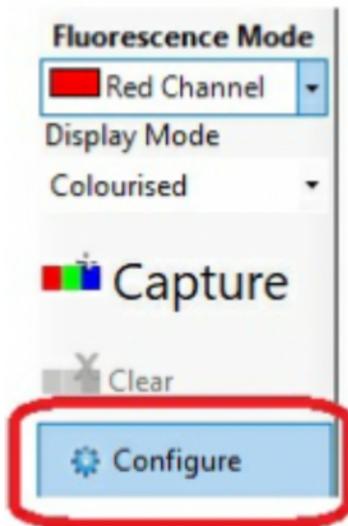## Creating multi-channel (two or three) colour fluorescence images / composites:

Before starting your image capture please check:
1. Select a channel to activate the fluorescence module (Red, Green or Blue).
2. Press CONFIGURE and make sure you are in "Colour Channel Copy" mode.
3. Choose your composite options (most people tick all three).
4. Choose your ACTIVE CHANNELS i.e. if you are only using FITC / TRITC make sure BLUE is unticked.

5. Choose your display mode - "Colourised" or Raw Greyscale".
6. Set-up the camera parameters for each channel (you can also adjust camera settings for each channel during image capture).
7. In the SAVE OPTIONS select your image output folder, file name and file format.
8. STARTING AT RED press CAPTURE and follow the on-screen instructions.
9. Images will be saved and named as per your SAVE OPTIONS.
10. Press CLEAR to start again.
11. Images will be saved in numbered groups starting from 001 e.g. Test001 Blue, Test001 Composite, Test001 Green, Test001 Red - PRESS CLEAR - Test002 Blue, Test002 Composite, Test002 Green, Test002 Red etc. Click the link to the image folder at the bottom of the screen to open Windows Explorer and view your captured images.

Add fluorescence to brightfield images e.g. when using phase contrast or DIC:

1. Press CONFIGURE and choose "Brightfield Colour Addition".
2. Choose your Auto Composite Options (most people tick all three).
3. Tick "Brightfield" and whichever fluorophore(s) you are using (e.g. green).
4. Set-up the camera parameters for each channel (you can also adjust camera settings for each channel during image capture).
5. In the SAVE OPTIONS select your image output folder, file name and file format.
6. STARTING IN BRIGHTFIELD press CAPTURE and follow the on-screen instructions.
7. Images will be saved and named as per your SAVE OPTIONS.
8. Press CLEAR to start again.
9. Images will be saved in numbered in groups starting from 001 e.g. Test001 Brightfield, Test001 Composite, Test001 Green - PRESS CLEAR - Test 002 Brightfield, Test002 Composite, Test002 Green etc.
10. Click the link to the image folder at the bottom of the screen to open Windows Explorer and view your captured images.