BF/DIC image on Stellaris 8

When the motorized stage and 6-position nosepiece are set up on the system, you can acquire images with BF/DIC channel together with fluorescence channels when using 20x or 63x lens.

Refer to the basic manual for loading sample and find samples using "Fluo" or "BF" observation mode (touch screen panel).

- 1. Setup Kohler illumination.
 - a. Close the field diaphragm: Touch screen-> 1st tab -> Field, to reduce size to 5. Intensity: 108-120
 - b. Move the condenser knobs (on both sides) until you see the sharp image of the field diaphragm (hexagon).



c. Using condenser centering pins to move the conder so the hexagon is in the center of the field of view. Open the condenser aperture to 80% of the objective back aperture.



- 2. Setup DIC
 - a. Push analyzer (next to the nosepiece) onto the light path.(left to right: out to in position).



b. Slot DIC prism onto light path. (from left to right: out to in position).



c. Turn condenser so the corresponding DIC prism is engaged.



d. Turn the **polarizer** (in the bottom of condenser) to a position where the background of image becomes dark.



- e. Turn the objective DIC prism to achieve an optimal DIC image.
- 3. Move the analyzer out of the light path.
- 4. Touch screen: Go to CS mode.
- 5. Setup light path.
- Acquire-> Light path window. Select one of the light path window and click on "TLD PMT-off" to show the TLD PMT (transmitted light detector photon multiplier tube): switch to "On", set Gain to 10, change color to "grey".



7. You would be able to capture DIC image now. Do take note that as BF/DIC channel and fluorescent channel shares the laser power setting, you should define the laser setting for fluorescent channel followed by define the Gain for BF/DIC channel without changing the laser setting (as it has been set for the fluorescence channel already).

