Olympus Upright Imaging System User Guide: Fluorescence

Turn on Sequence

1. Turn on Power strip to right of scope.
2. Turn on Mercury lamp (A) and wait till burner light is ready.
3. Pull rod up (B) to set path for Mercury lamp.
4. Check that Fluorescence Shutter box power is on (C1) and shutter is flipped down to NC (C2).
5. Check light path levers (D and E)
   - Light path Light path (Top, D): IN for fluorescence camera, OUT for color (Motic) camera
   - Light path (Lower, E): IN for eyepieces, OUT for camera, HALF IN for both eyepieces and camera
6. Set filter turret (F) according to fluorescence emission of sample: 2 (DAPI), 3 (GFP), 4 (TxRed), 5 (far red), 6 (green & red)

7. Check zoom setting (G)

8. Make sure mechanical shutter is open (H).

9. Check that the DIC filter and polarizer are OUT (I)

10. For full power from the mercury lamp, make sure both the Diffusion filter (J) and neutral density (ND) filter (K) are OUT. To reduce power, push in the 2.5% ND filter.

11. Start Metamorph software.

**Turn off Sequence**

1. Exit software, log off computer
2. Turn off power strip
3. Turn off Mercury lamp. Note: Mercury lamp must cool for 15 min before restarting
4. Cover microscope

**Troubleshooting**

- Shutter box settings:
  Lever should be at **NC** (normally closed) to control shutter with software.
  Lever can be set to **NO** (normally open) for manual control of light to eyepieces.
  If Epi shutter on Metamorph software does not respond, toggle Reset on shutter box.