## bio-rad nikon e600

## GENERAL OPERATION

- 1 Turn on mercury lamp power supply and other components in the usual order.
  - a. The new mercury lamp power supply is turned on by simply flipping up the black switch.
- 2 Set optical path to 100% to the binoculars by inserting lever to right of eyepiece tube.
- Rotate the objective turret to the desired lens making sure that the stage is lowered enough for the lens to clear but not so low as to hit the polarizer below the condenser.
- 4 Move the epi-fluorescence filter slider to desired setting.
- 5 Open the shutter.
- 6 When switching to confocal mode:
  - a. Turn off transmitted light if used.
  - b. Set filter cube slider to open position.
  - c. Close the shutter
  - d. Pull out the lever to the right of the eyepieces (this sends light to the confocal scan head).
  - e. Proceed with scan as usual.
- 7 Remember, when returning to eyepiece mode:
  - a. Push in the lever to the right of the eyepieces (this sends light to the microscope eye pieces).
  - b. Select desired filter cube with slider.
  - c. Open the shutter.
  - d. Turn on transmitted light if desired.

## **BRIGHTFIELD OPERATION**

- 1 Make sure the lever to the right of the eyepieces is inserted.
- 2 Turn on power with green switch on the right side of the base.
- Rotate the objective turret to the 10x lens, making sure that the stage is lowered enough for the lens to clear, but not so low as to hit the polarizer below the condenser.
- 4 Place microscope slide on stage.
- 5 Raise the condenser as high as it will go.
- 6 Fully open the field diaphragm and aperture diaphragm.
- 7 Move the specimen using stage controls until the portion to be viewed is in the optical path.
- 8 Set optical path to 100% to the binoculars by inserting lever to the right of the eyepiece tube.
- 9 Adjust the interpupillary distance of eyepieces.
- 10 Locate sample and focus.
- 11 Align the condenser by:
  - a. Rotate condenser to setting A (brightfield).
  - b. Close the field diaphragm until visible.
  - c. Focus and center the condenser.
  - d. Adjust the field diaphragm so that it is just outside the field of view.
  - e. Leave the condenser aperture diaphragm open (for most applications).
- 12 Switch to another lens if desired.
  - a. Refocus sample.
  - b. Check and adjust the field diaphragm if desired.
- Rotate condenser to other setting if desired (phase, DIC, darkfield).

## DIC OPERATION

- 1 Make sure condenser is aligned.
- 2 Rotate condenser turret to the proper setting for the desired objective lens (marked on the objective).
- 3 Insert the slider located just below the eyepieces.
- 4 Rotate the polarizer (below the condenser) to achieve proper contrast.

