NPE Start-up and Shutdown Procedure

Daily System Startup Procedure:

- 1. Turn on the computer switch and start the NPE 2.3 Quanta software
- 2. Under "Instrument" select "start up" and follow the instructions on the screen.
- 3. After cleaning cycle is complete, select "Instrument" and the select "Power Setting". Obtain the "Lamp Voltage" by looking the inside the instrument at the digital readout on the power supply.
- 4. Input the "Lamp Voltage in the "power setting" dialog box. This will give you the potentiometer setting. Set the potentiometer value by turning the dial on the power supply.
- 5. Close the instrument cover to keep external light from interfering with optical measurement.

Calibration Procedure:

- 1. Add 2 ml of NPE nuclear isolation and staining solution (NIM-DAPI) to a sample cup or tube. Make sure the sample cup or tube is particle free.
- 2. Mix the NPE DNA reference calibrator by gently turning the vial upside down a few times making sure to hold the vial by its cap. Add one drop of the calibrator to the sample cup from step 1. The concentration should be approximately 1 million/ml.
- 3. Aspirate the solution with a small disposable pipette and filter it with a 25 um NPE filter tip into another sample cup.
- 4. You may store this solution at 4°C for up to 6 hours.
- 5. Put an empty cup on the Quanta and press "Rinse".
- 6. Place the calibrator sample on the Quanta and press "Start" The system will inject the sample, stabilize and then run.
- 7. The rate should be set with the slider bar to 100-150 cells.
- 8. Set the fluorescence peak at the recommended channel of 200 by turning the fluorescence dial on front of the instrument. Press the Esc key until the desired channel is achieved.

- 9. Set the volume peak at the recommended channel of 100 by turning the volume dial on front of the instrument. Press the Esc key until the desired volume is achieved.
- 10. Make sure that the peak is narrow, this will assure a tight CV.

Shutdown Procedure:

- 1. Under "Instrument" select "Shutdown" from the software menu.
- 2. Follow the directions in the Shutdown box.