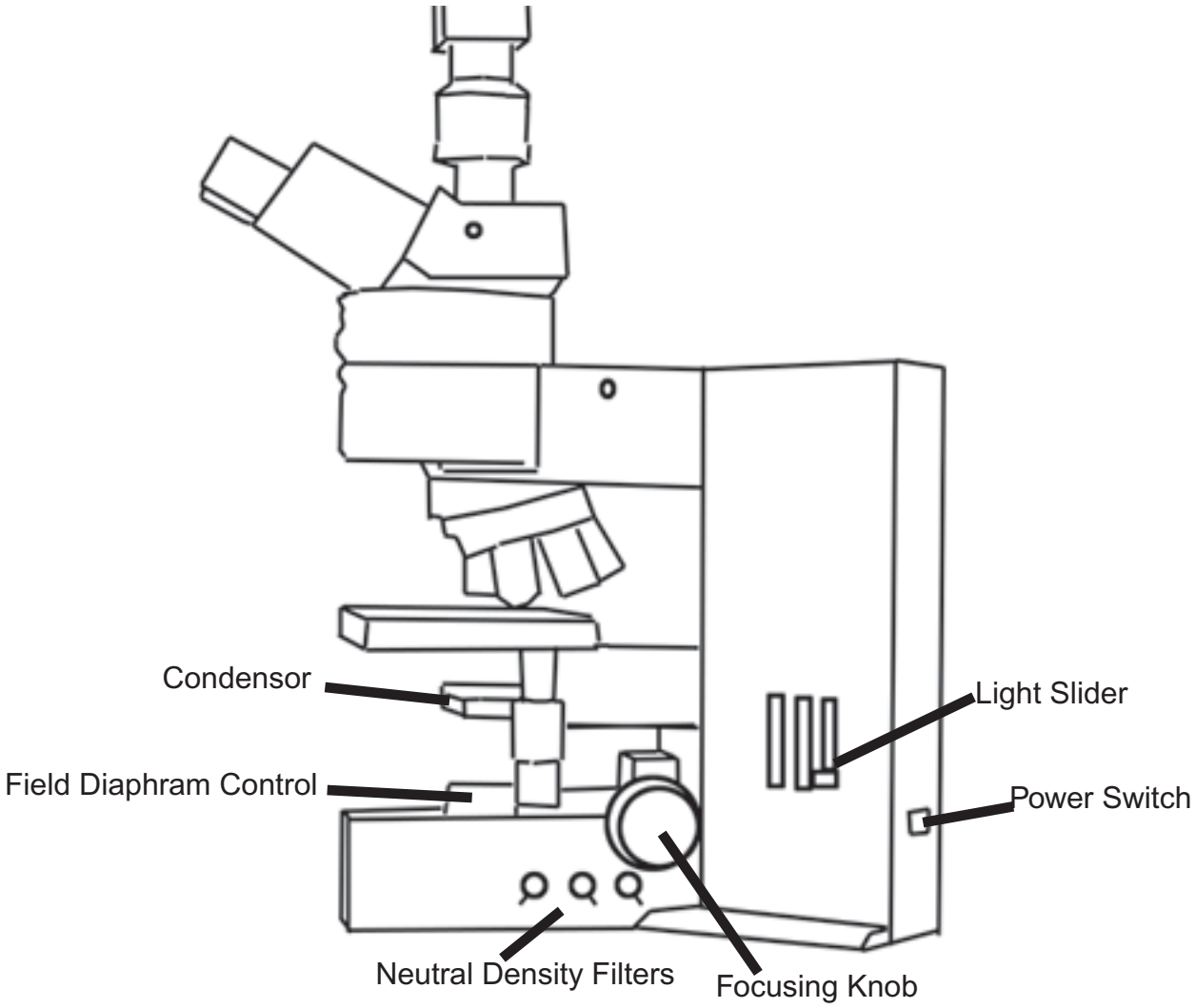
Olympus Upright Microscope Brightfield

1, Turn the equipment on

a. Power switch for microscope is on the right at the back

b. Adjust the light with the slider (move to the camera icon)



2. Perform Kohler Illumination *(for step-by-step pictorial view see following page)*

a. Put a slide on the stage. Use the 10x objective.

b. Open the condensor and the field diaphragm all the way.

c. Move the condensor up close to the slide, using the condensor focus.

d. Focus the sample. Use the neutral density filters if it's too bright.

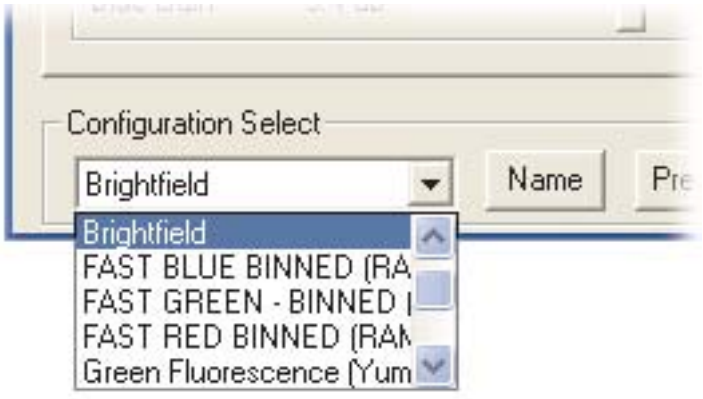
e. Close the field diaphragm as far as it goes. A small circle of light should be seen in the eyepieces.

f. Center the small circle using the condensor centering rods.

g. Focus it until the blade edges can be seen using the condensor focus. It will probably have to be re-centered again after this.

h. Open the field diaphragm all the way.

i. Take off one of the eyepieces and close the condensor by about 10%.



3. Running the Scion VisCapture software

a. Open the Scion VisCapture software

b. **Image > Show Properties** to pull up the **Camera Properties** (this can be left up)

c. Select the **Brightfield** profile under **Configuration Select**

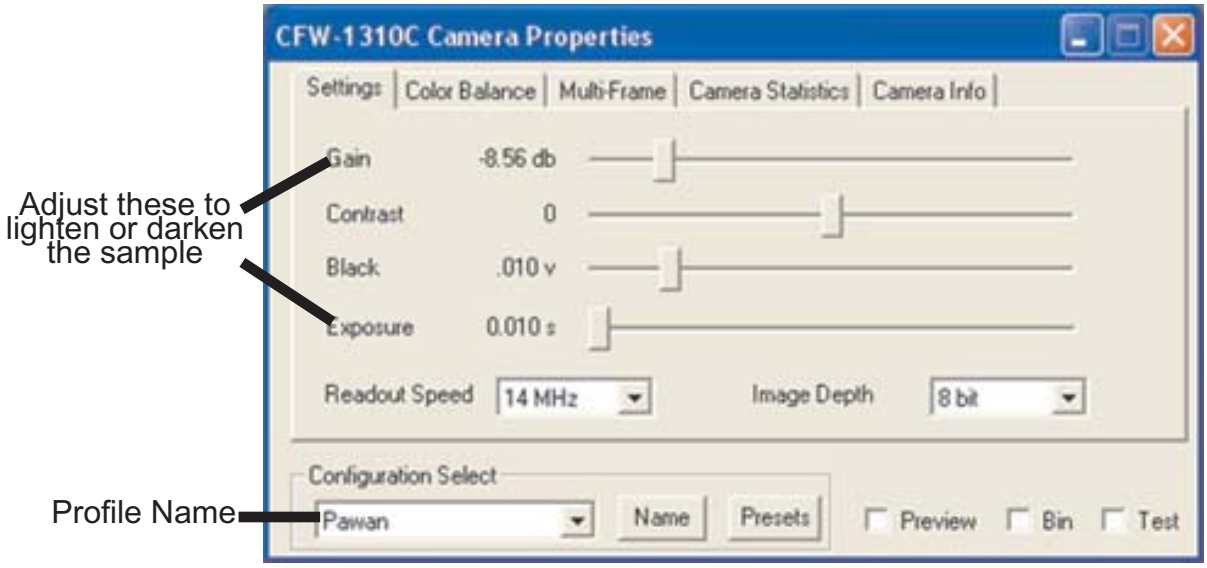
d. Perform White Balance
   i. Click on the **Color Balance** tab
   ii. Select an area off the sample
   iii. Click **AWB**

e. Under **Settings**, adjust the Gain and Exposure to lighten or darken

f. Set **Gamma** to about 0.6 (under **Color** tab)

g. Click on the **Multi-Frame** tab and set **Average** to **4**

h. Taking a picture
   i. **Click** on the image or go I**mage > Snap**
   ii. **File > Save**
   iii. **Image > Start Live Caputring** or press **Ctrl +G** to go back to live mode



Olympus Upright Microscope Fluorescence

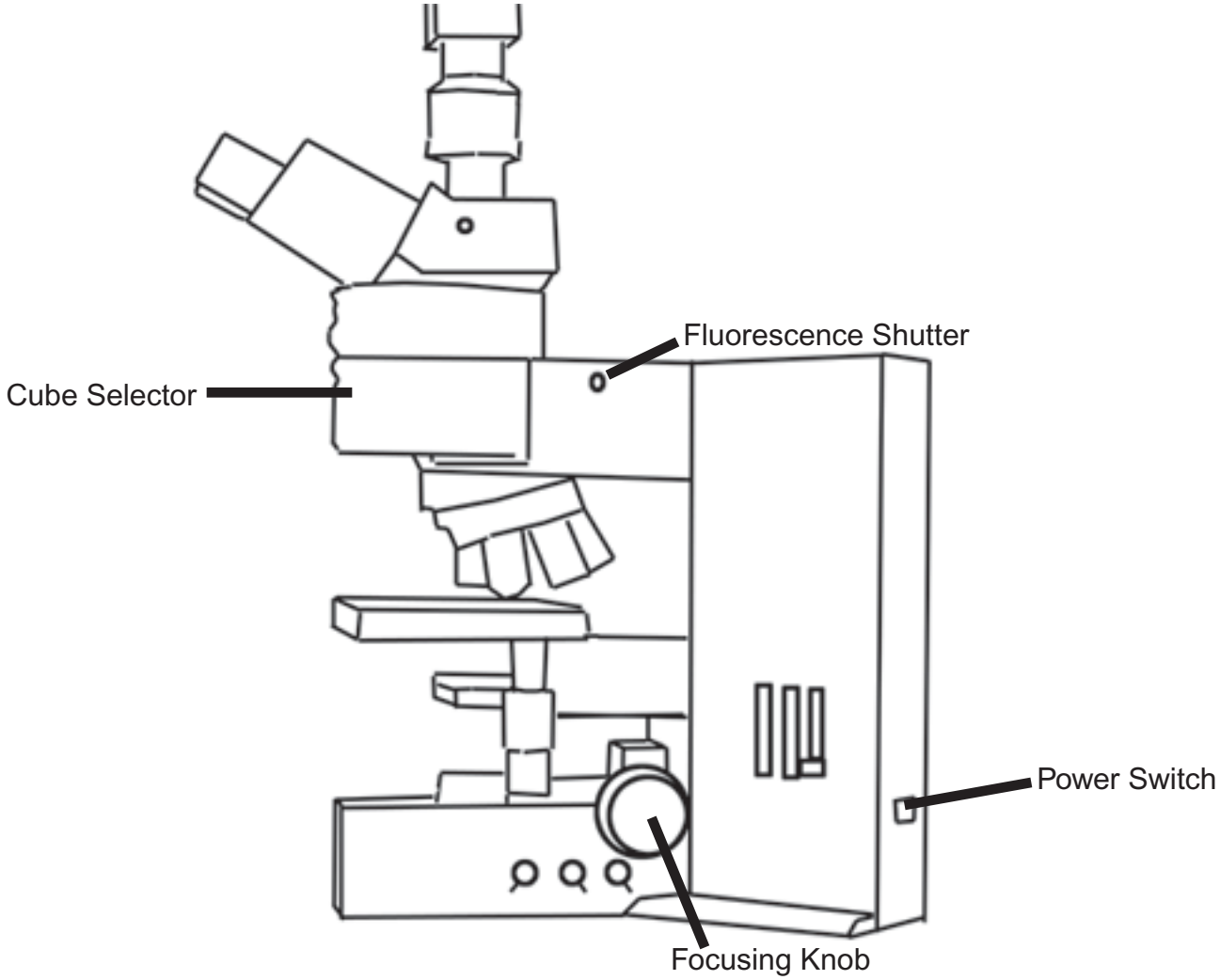
1, Turn the equipment on

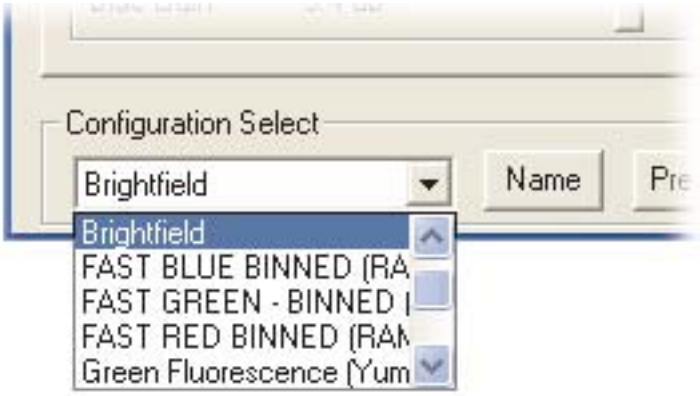
a. Power switch for micrscope is on the right back

b. Turn the lamp on (box behind microscope)

c. Open the shutter by pushing it **IN**

d. Select cube





2. Running the Scion VisCapture software

a. Open the Scion VisCapture software

b. **Image > Show Properties** to pull up the **Camera Properties** (this can be left up)

c. Select a **Fluorescence** profile under **Configuration Select**

d. Under **Settings**, adjust the Gain and Exposure to lighten or darken

e. Set **Gamma** to about 1 (under **Color** tab)

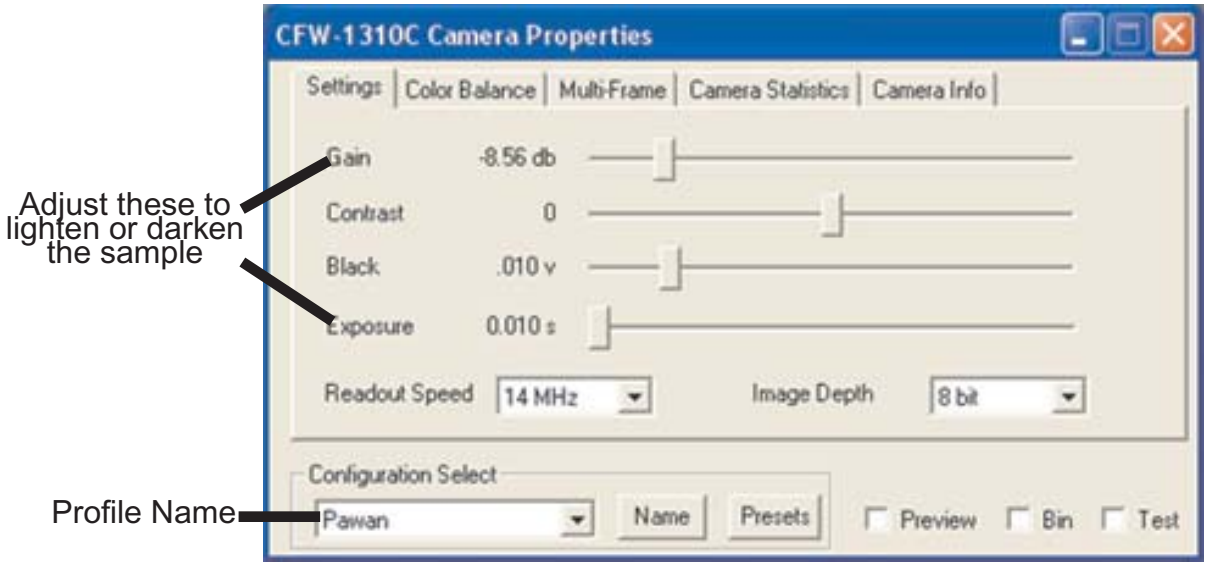
f. Check the color gain
   i. **Green Fluorescence**
      Green Gain at **10.2** db, **Red** and **Blue** at **-2.0** db

   ii. **Red Fluorescence**
      Red Gain at **10.2** db, **Green** and **Blue** at **-2.0** db

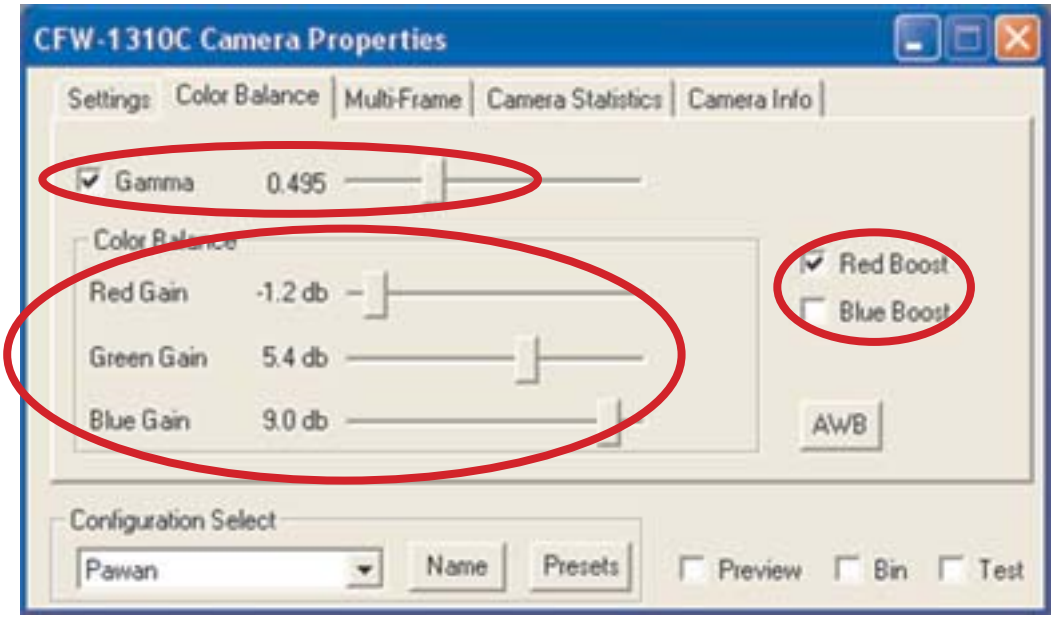
   iii. **Blue Fluorescence**
      Blue Gain at **10.2** db, **Red** and **Green** at **-2.0** db

f. Click on the **Multi-Frame** tab and set **Average** to **4**

g. Taking a picture
   i. **Click** on the image or go I**mage > Snap**
   ii. **File > Save**
   iii. **Image > Start Live Caputring** or press **Ctrl +G** to go back to live mode



Default Settings for Scion VisCapture Software



Brightfield Settings

Gamma at **0.6**

Red, **Green**, and **Blue Gain** in a rough line

Fluorescence Settings

Gamma at **1**

Fast Fluorescence

Bin makes smaller images but is faster (used for dim pictures)

Green Fluorescence

Green Gain at **10.2** db, **Red** and **Blue** at **-2.0** db

Red Fluorescence

Red Gain at **10.2** db, **Green** and **Blue** at **-2.0** db

Only **Red Boost** checked

Blue Fluorescence

Blue Gain at **10.2** db, **Red** and **Green** at **-2.0** db

Only **Blue Boost** checked