Cellometer

- 1 Peel back the plastic on the bottom of the slide a few centimeters
 - a Do not remove the bottom plastic all the way
- 2 Remove the top plastic
 - a Be careful not to touch the top of the slide with your fingers
- 3 Put on gloves
- 4 Place the slide on a flat surface
- 6 Label the two windows (1 & 2) with a pen or Sharpie
 - ·
- 5 Briefly vortex the sample
- $6\,$ Collect exactly $\,20\,\mu\text{L}$ of cells and put them in the slide as described below
- 7 Below is a picture of 1/2 of a cell counting slide

a My group and slide #

- a Note there is one side with a Notch labeled "Sample Introduction Port"
- b This is the hole you will use to put your sample into by holding the tip at about 70 degrees and gently touching the bottom of the slide



Air Evacuation Port Sample Introduction Port

c Slowly depress the pipette to the *first stop*. You do not want to introduce air bubbles into the slide

- 8 The second member of the group repeat step 5 through 7 c
- 9 With your gloves on, pick up the slide by gripping the edges and gently peel the rest of the plastic film on the bottom of the slide (*DO NOT SET SLIDE DOWN*)
- 10 place the slide into the receptacle on the Nexcelom Cellometer and gently push to the back of the receptacle
 - a Gently wiggle the slide back and forth to ensure it is flat.
- 11 Select the protocol "Small Cell Propidium Iodide"

a Select "Preview Image for Current Assay"

- 12 Touch "Sample ID" and name it your group number _1 or 2 (Depending on window)
- 13 Touch "Dilution Factor" and set to 10
- 14 Touch the magnifying glass with the + to zoom in
- 15 Use the Focus (Course and fine) to match the image on the screen to the card provided on the machine
 - a You may need to adjust the exposure to see your cells, but probably not
- 16 Select Count and wait
 - a the machine will take 4 brightfield (all cells) and 4 fluorescent (dead) images.
- 17 Take a picture of the screen so you can put the information in your lab manual

How many total cells do you have? How many dead Cells do you have?

Do your numbers match your partners? Why not?

What is the Viability %?

Difference between cellometer and cytometer?

In your note book, briefly describe why the samples are different and which is more accurate