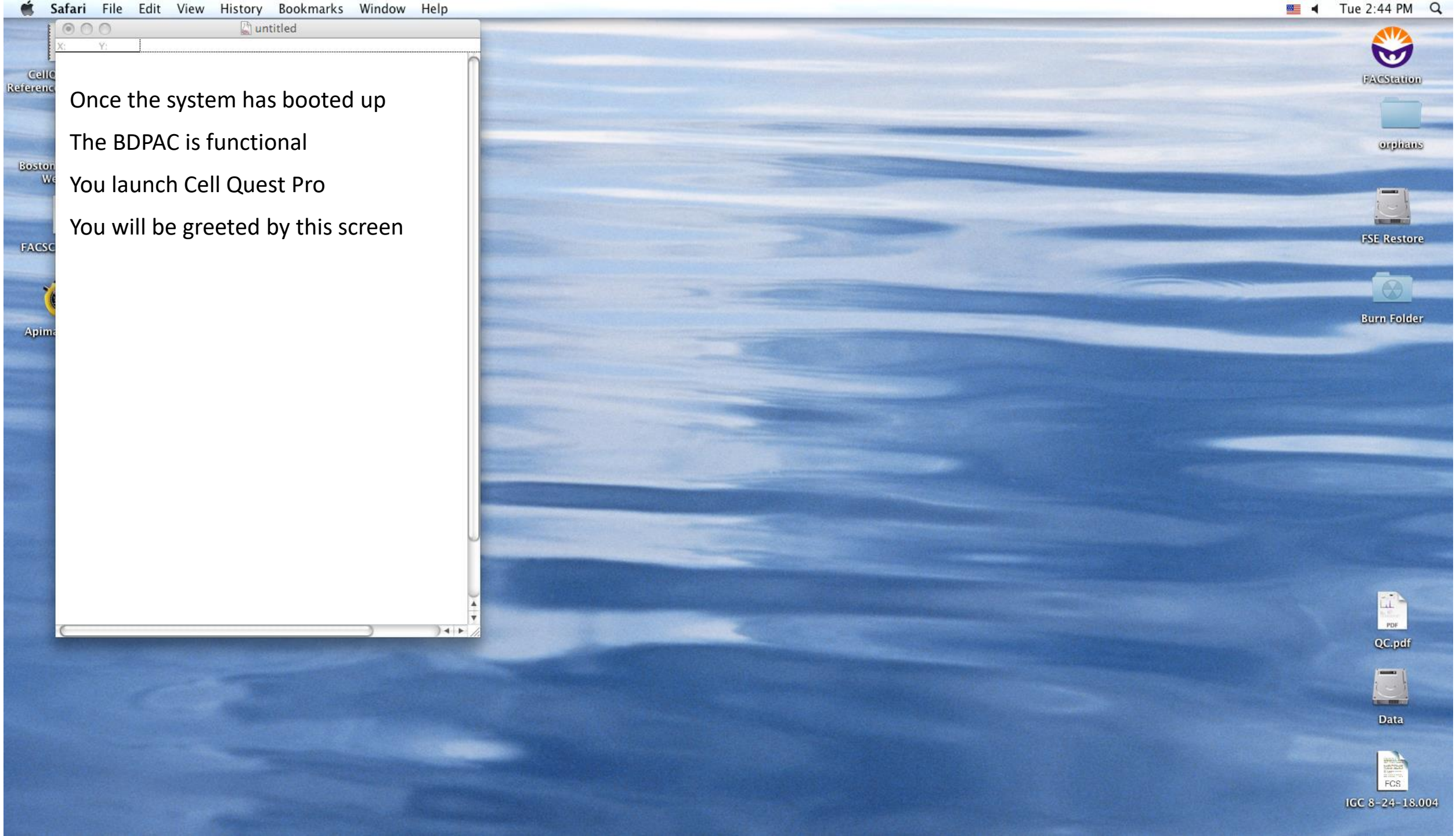
Cell Quest Pro

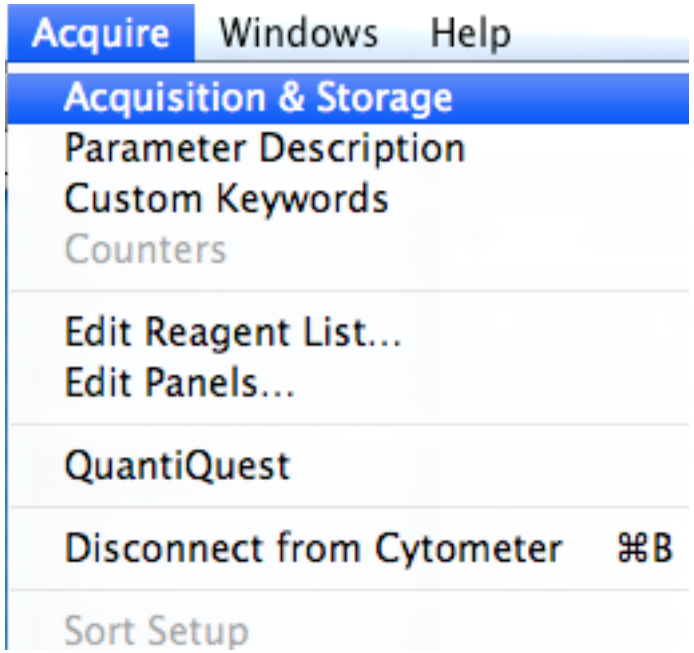
Operational Overview

Part of Hybrid Training system

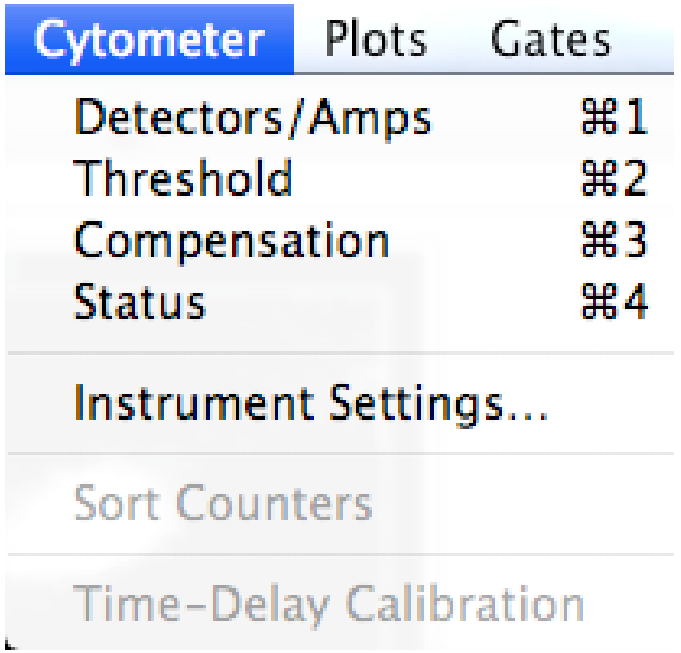
2020 rev 1

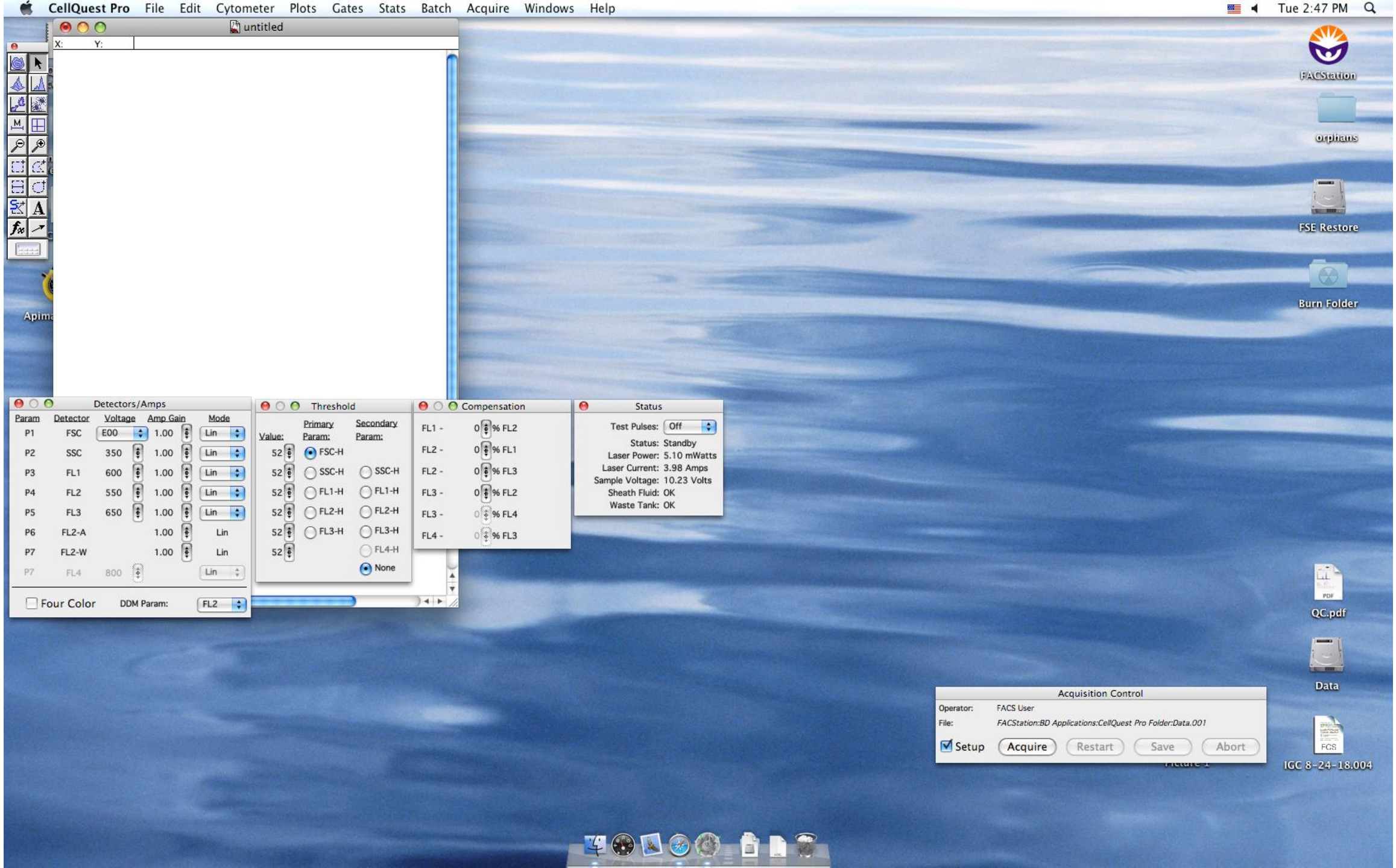

Safari File Edit View History Bookmarks Window Help
Tue 2:44 PM
untitled
Once the system has booted up
The BDPAC is functional
You launch Cell Quest Pro
You will be greeted by this screen
FACStation
Orphans
FSE Restore
Burn Folder
QC.pdf
Data
IGC 8-24-18.004

- The next step that must be done in order to do anything else is a visit to the acquire tab and select Connect to Cytometer
  - CMD-B



- Once connected to the cytometer
- Open the cytometer menu tab and launch all four of the CMD shortcuts
- This will allow you to adjust your voltages and see if the system is happy. (1 and 4 are crucial, 3 is not necessary for single color runs, 2 is at an acceptable default)

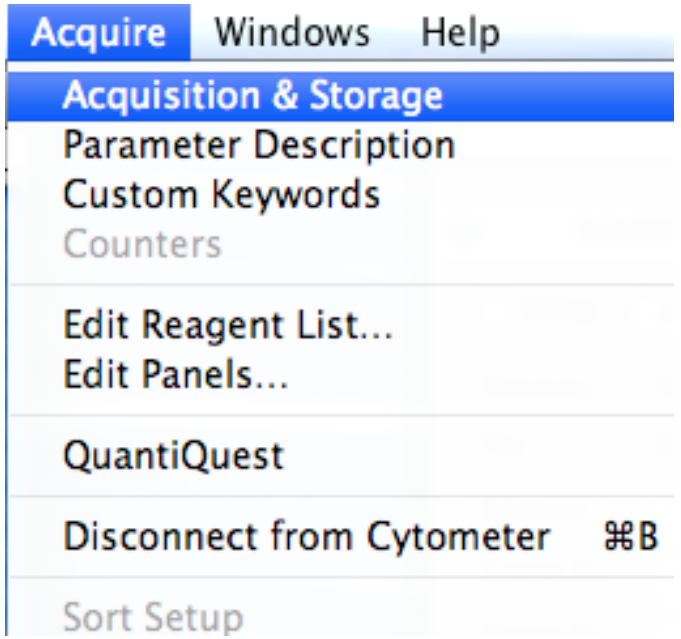



CellQuest Pro File Edit Cytometer Plots Gates Stats Batch Acquire Windows Help
Tue 2:47 PM
untitled
X: Y:
FACStation
orphans
FSE Restore
Burn Folder
Detectors/Amps
Param Detector Voltage Amp Gain Mode
P1 FSC E00 1.00 Lin
P2 SSC 350 1.00 Lin
P3 FL1 600 1.00 Lin
P4 FL2 550 1.00 Lin
P5 FL3 650 1.00 Lin
P6 FL2-A 1.00 Lin
P7 FL2-W 1.00 Lin
P7 FL4 800 Lin
Four Color
DDM Param: FL2
Threshold
Value: Primary Param: Secondary Param:
FSC-H
SSC-H
FL1-H
FL2-H
FL3-H
FL4-H
None
Compensation
FL1 - 0 % FL2
FL2 - 0 % FL1
FL2 - 0 % FL3
FL3 - 0 % FL2
FL3 - 0 % FL4
FL4 - 0 % FL3
Status
Test Pulses: Off
Status: Standby
Laser Power: 5.10 mWatts
Laser Current: 3.98 Amps
Sample Voltage: 10.23 Volts
Sheath Fluid: OK
Waste Tank: OK
QC.pdf
Data
IGC 8-24-18.004
Acquisition Control
Operator: FACS User
File: FACStation:BD Applications:CellQuest Pro Folder:Data.001
Setup
Acquire
Restart
Save
Abort

- Now go back to acquisition,
- This time choose Acq&Storage
  - Here you can specifiy how many events you would like capture before the data file closes. Default is 10k
  - Don’t change any of the other parameters unless you know what you are doing

Choose Counters to bring up a super useful little window that allows you to monitor your events

Parameter Description will allow you enter specific information with your tubes



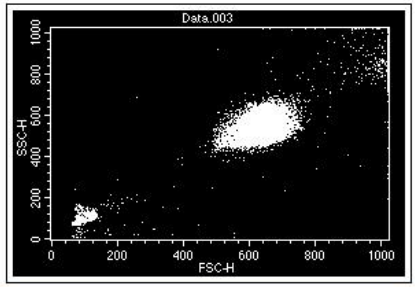
CellQuest Pro File Edit Cytometer Plots Gates Stats Batch Acquire Windows Help

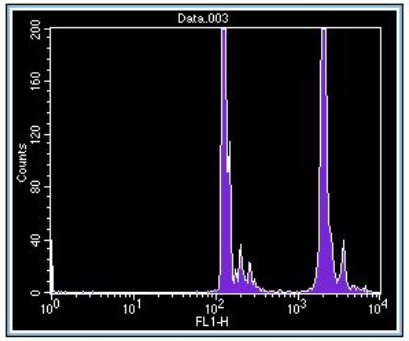
Tue 3:17 PM

Acquisition & Storage
Parameter Description
Custom Keywords
Counters
Edit Reagent List...
Edit Panels...
QuantiQuest
Disconnect from Cytometer ⌘B
Sort Setup

STARTER

X: 919 Y: 522





Histogram Statistics

File: Data.003
Sample ID:
Tube: Untitled
Acquisition Date: 01-Sep-20
Gated Events: 20000
X Parameter: FL1-H (Log)

Log Data Units: Linear Values
Patient ID:
Panel: Untitled Acquisition Tube List
Gate: No Gate
Total Events: 20000

Marker	Left, Right	Events	% Gated	% Total	Mean	Geo Mean	CV	Median	Peak Ch
All	1, 9910	20000	100.00	100.00	1365.45	751.34	71.45	1910.95	1963

Detectors/Amps

Param	Detector	Voltage	Amp Gain	Mode
P1	FSC	E00	5.57	Lin
P2	SSC	363	1.00	Lin
P3	FL1	412	1.00	Log
P4	FL2	550	1.00	Lin
P5	FL3	650	1.00	Lin
P6	FL2-A		1.00	Lin
P7	FL2-W		1.00	Lin
P7	FL4	800		Lin

Four Color DDM Param: FL2

Browser: STARTER

Acquisition Analysis

Controls

quire Restart Save Abort

:Todd:20200901: Change...

.002 Change...

CS User

Comments:

Untitled Parameter Settings

P1: P2: P3: P4: P5: P6: P7: P8: Time:

Experiment Components	Filename
Global Settings	
Acquisition Plots	
Untitled Acquisition Tube List	

Counters

Total Events: 20000
Events/Second: 1180
Elapsed Time: 00:01:01
Reset

Inspector: No Selection

Status

Test Pulses: Off
Status: Standby
Laser Power: 5.00 mWatts
Laser Current: 3.98 Amps
Sample Voltage: 6.96 Volts
Sheath Fluid: OK
Waste Tank: OK

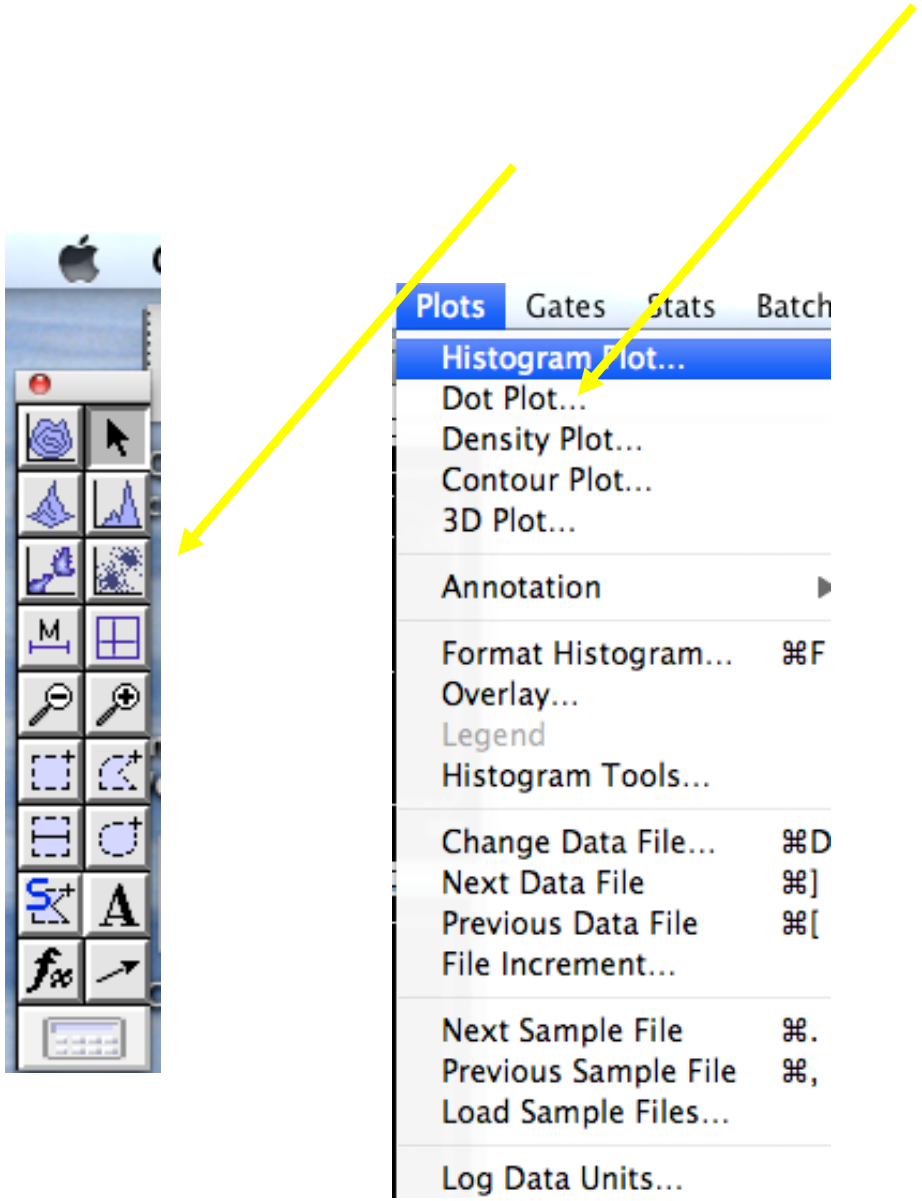
Acquisition Control

Operator: FACS User
File: Data:Todd:20200901:Data.004

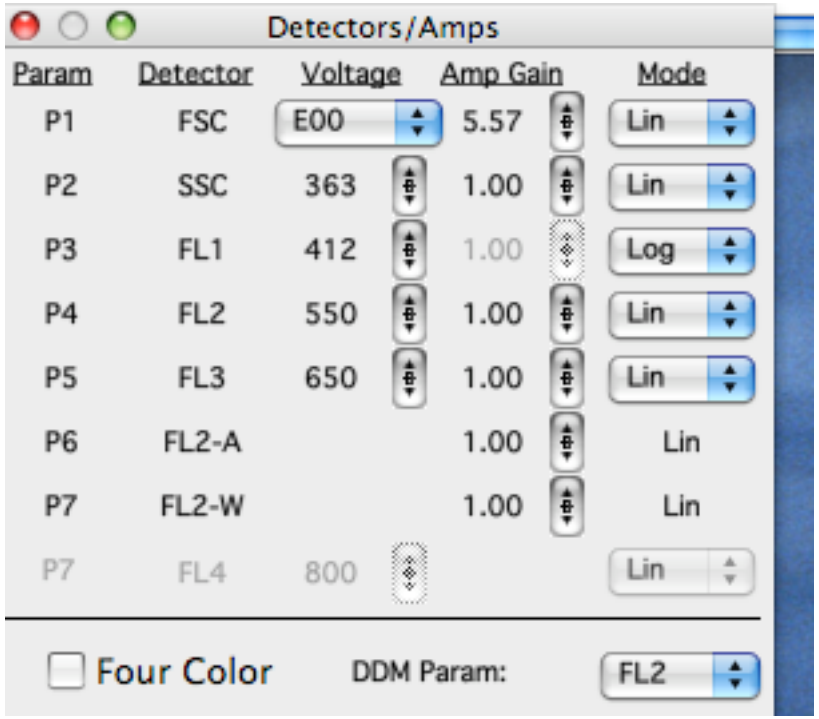
Setup Acquire Restart Save Abort

FACStation
orphans
SE Restore
urn Folder
Picture 2
Picture 3
Picture 4
QC.pdf
Data
IGC 8-24-18.004
Apimac

- Either open a document that you have previously created or obtained or simple draw a dot plot in the untitled workspace by clicking dot plot icon or plots menu then dragging on the workspace.
- Once you draw a plot the Inspector window appears. With the plot selected, select acq and analysis in the mode.



- Make sure that the acq control box has setup checked
- Place one of your samples on the SIP, click run on the front of the cytometer (check that light turns green)
- Now you can click run in CQ to start seeing events. See events in the counter window
- Now you are ready to adjust your voltages.
- Once the voltages are adjusted to suit your data. Stop running the sample.
- TIP: you want your FSCvSSC to have a nice population totally on scale without tons of debris



- Nice population on fsc ssc
- Histogram plot of FL shows on scale peaks. (unstained cells set to first decade of log scale during set up)
- File name and save path set in acq control, setup is unchecked.
- You are ready to start for real!