

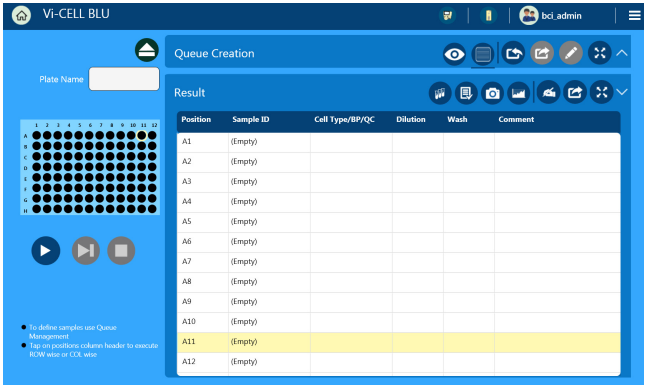
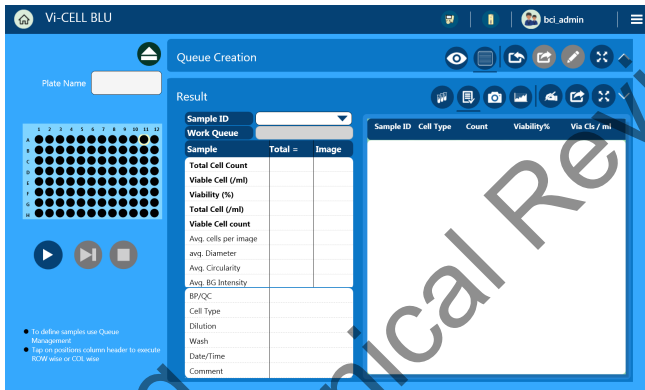


- 5 Select  to finish programming the 96 well microplate.
- 6 Select  to run the 96 well microplate queue.
- 7 Plate results list.



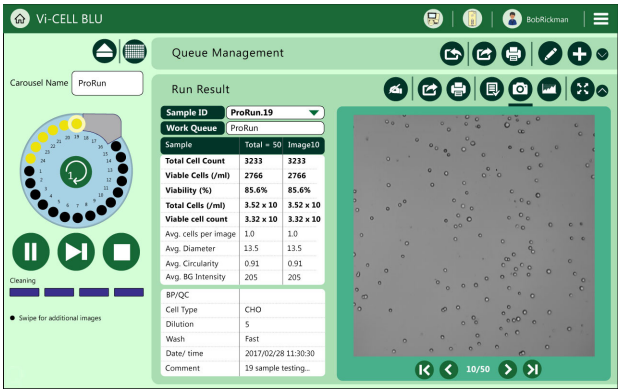
- 8 Plate sample results.



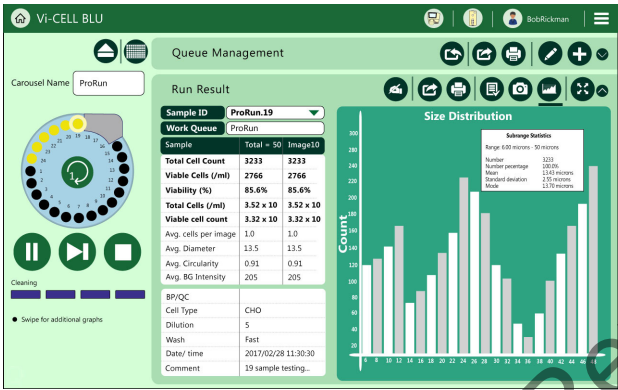
# Run Results

Green Screens need to be replaced throughout

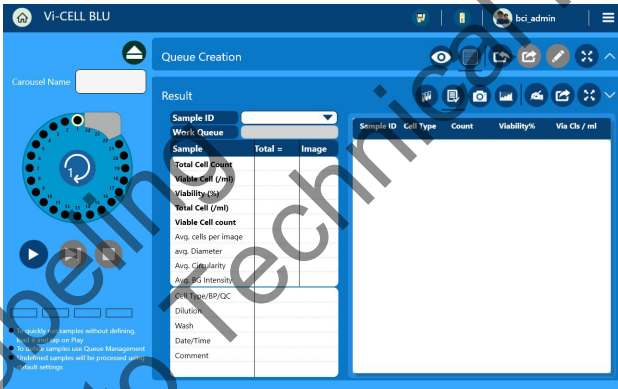
- Camera image results.



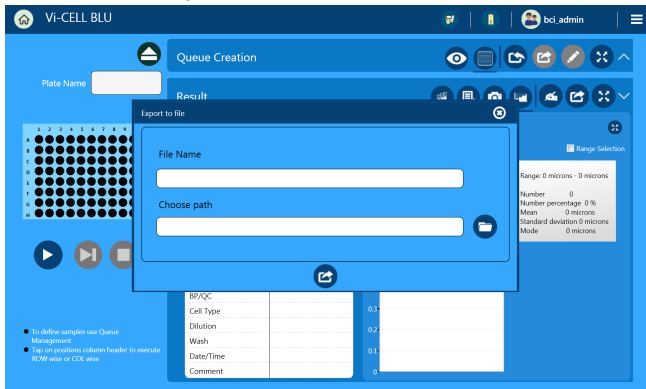
- Graphical results.



- Carousel cell type, count and viability results.

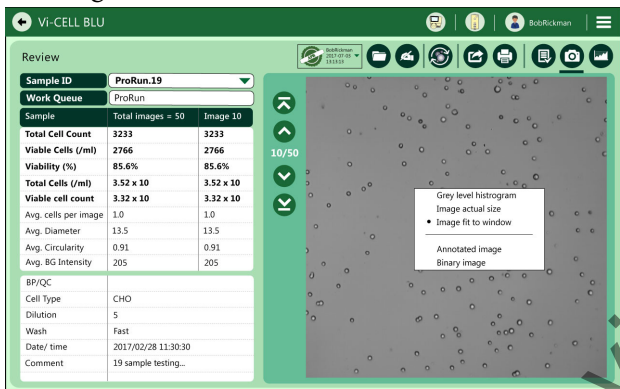


- Plate cell type, count and viability results.

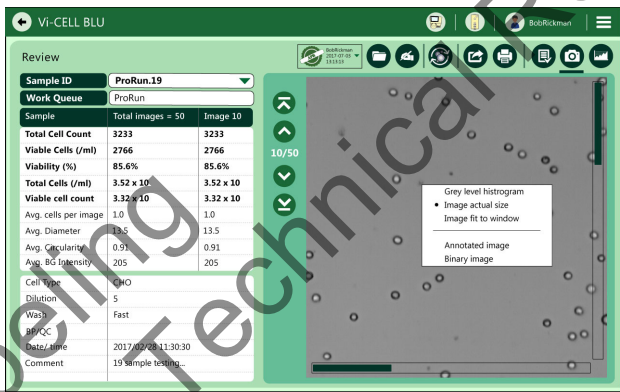


### Camera Image Options

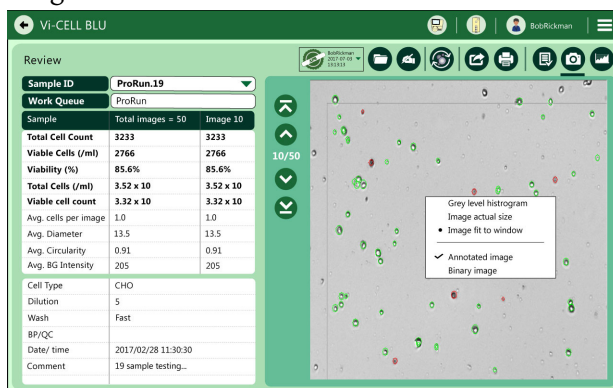
- Grey level histogram, Image fit to window.



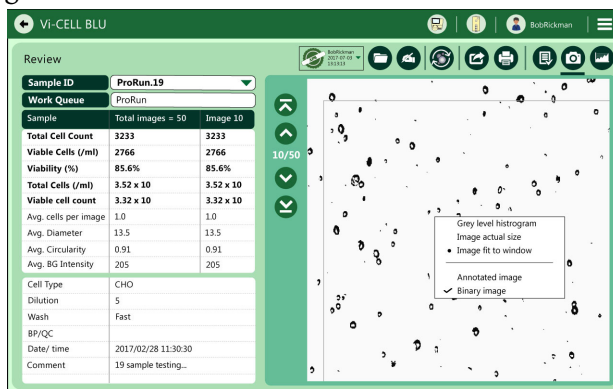
- Grey level histogram, Image actual size.



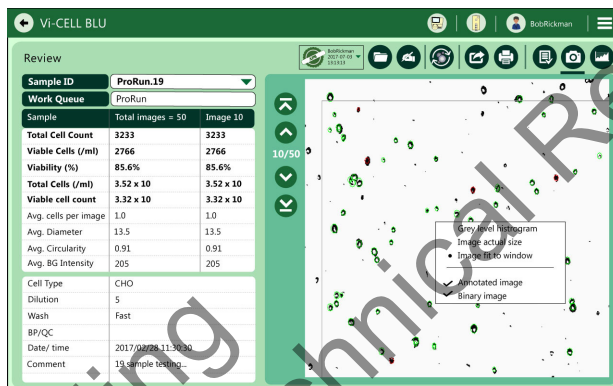
- Annotated image, Image fit to window.



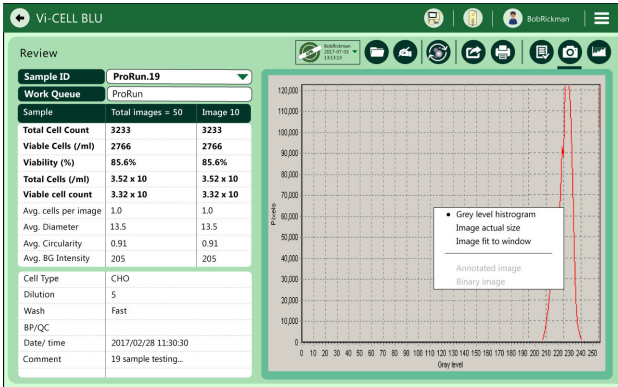
- Binary image, Image fit to window.



- Annotated and Binary image, Image fit to windows.



- Grey level histogram.



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## Bioprocess Results

Green Screens need to be replaced throughout

### What Is A Bioprocess?

A bioprocess consists of the analysis results of a number of samples taken from the same source over a period of time. The source might be a bioreactor, a fermentation vessel or even a laboratory flask. A source may be associated with many bioprocesses as when one bioprocess finishes (for example when a bioreactor is harvested) then another separate bioprocess can be started. The measurements associated with a single bioprocess can be manipulated (opened and closed) as if they were a single entity. The Vi-CELL BLU is designed to make it easy to monitor multiple, asynchronous, bioprocesses at the same time. Changes in selected analysis parameters over time can be displayed making it easy for example to check the progress of a bioreactor and to choose the optimum time for harvest.

The Vi-CELL BLU bioprocess feature allows convenient, automated “tracking” of any of the measured cell culture parameters and calculates growth rate, doubling time, all essential to optimum bioreactor productivity. Data points are recorded and stored, eliminating the necessity for manual recording of the cell culture measurements. See.

Growth Rate and Doubling times are calculated from the results of the last two runs using the formulas: Colin asks if Vi-Cell BLU does this

Growth rate per hour =  $(\ln V2 - \ln V1) / (t2 - t1)$

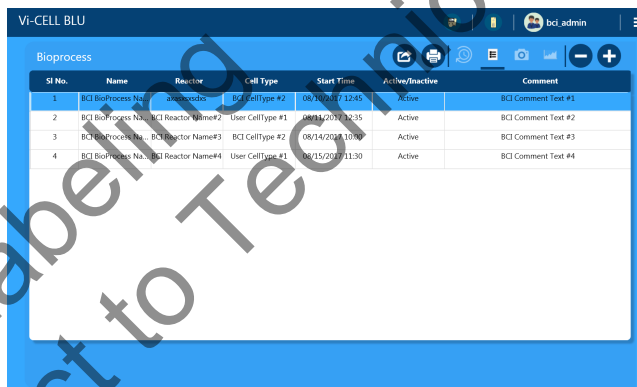
Doubling time in hours =  $\ln 2 / \text{Growth rate per hour}$

Where

V1 = Viable cell concentration in cells/mL at elapsed time t1 in hours

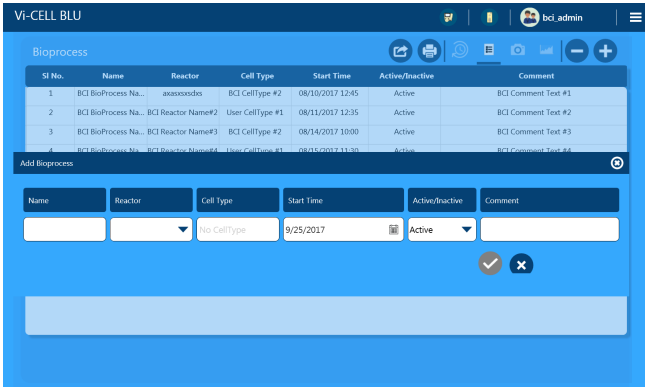
V2 = Viable cell concentration in cells/mL at elapsed time t2 in hours

- Bioprocess list results.

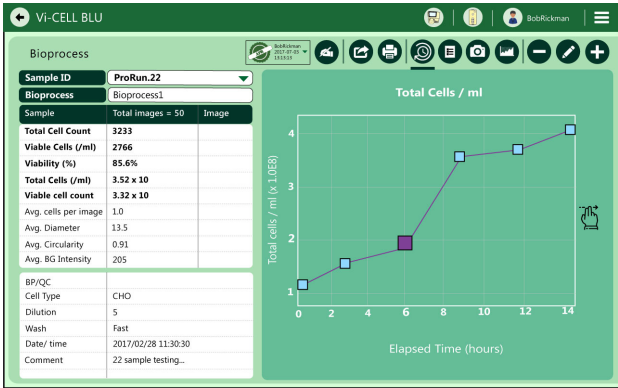


SI No.	Name	Reactor	Cell Type	Start Time	Active/Inactive	Comment
1	BCI BioProcess Name#1	BCI Reactor Name#1	BCI CellType #2	08/14/2018 12:45	Active	BCI Comment Text #1
2	BCI BioProcess Name#2	BCI Reactor Name#2	User CellType #1	08/14/2018 10:35	Active	BCI Comment Text #2
3	BCI BioProcess Name#3	BCI Reactor Name#3	BCI CellType #2	08/14/2018 10:00	Active	BCI Comment Text #3
4	BCI BioProcess Name#4	BCI Reactor Name#4	User CellType #1	08/15/2018 11:30	Active	BCI Comment Text #4

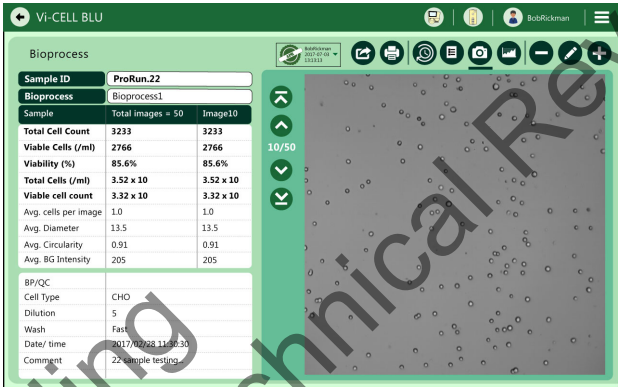
- Add Bioprocess screen.



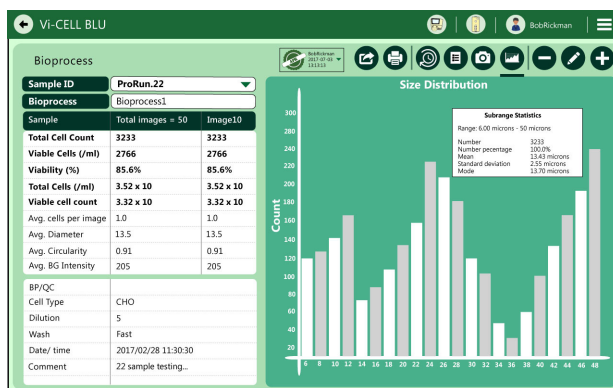
- Bioprocess Total Cells/mL results.



- Bioprocess camera results.



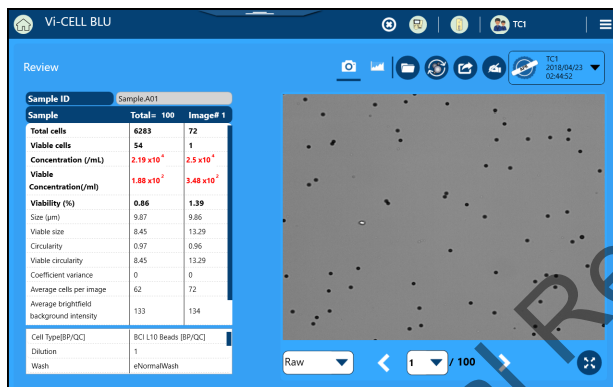
- Bioprocess size distribution results.



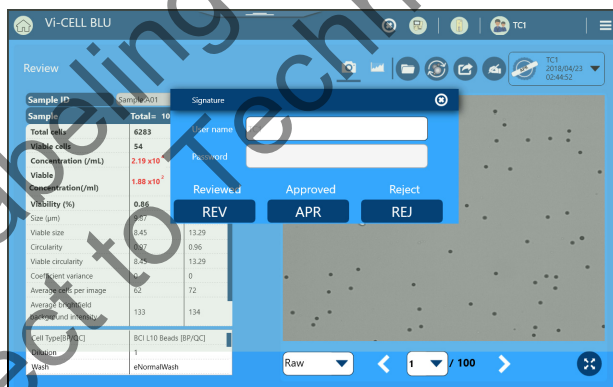
## Signoff Results

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- 1 When Security is enabled, you need to select  to signoff results after sample processing.

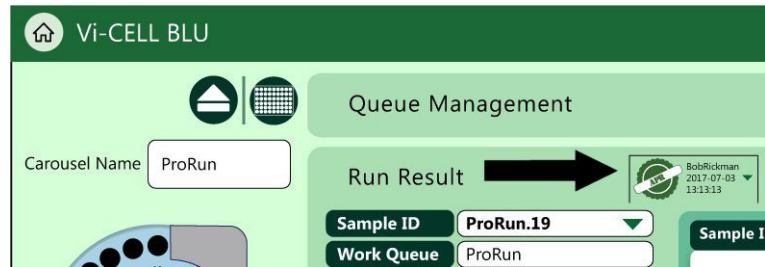


- 2 Enter your User Name and Password and select Creation (CRE) Review (REV) or Approve (APR)..





- 3 Your approval credentials are shown on the Run Result screen.




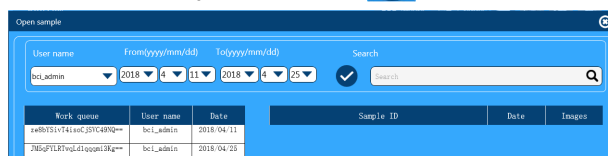
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## Reviewing/Reanalyze Data

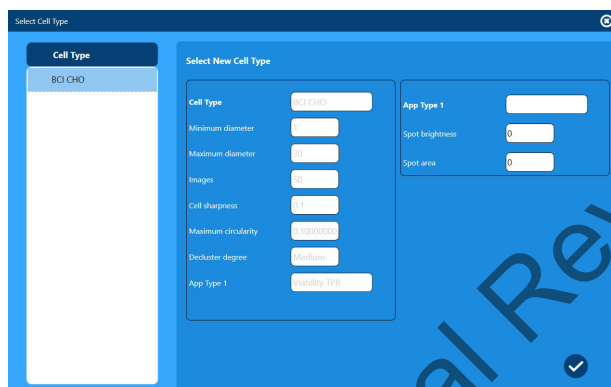
1 Select  and  to choose a file to review.

2 Select a sample to review or reanalyze and select .



Work_queue	User_name	Date	Sample ID	Date	Images
xe8b131v741e0c201c489q==	bcl_admin	2018/04/11			
JH5qP1LR7v0Ld1gga238g==	bcl_admin	2018/04/25			

3 If desired, change the Cell Type,.



Cell Type

BCI CHO

Select New Cell Type

Cell Type: BCI CHO

Minimum diameter: 1

Maximum diameter: 2

Images: 0

Cell sharpness: 0

Maximum circularity: 2.0000000

Decluster degree: Medium

App Type 1: 0

Spot brightness: 0

Spot area: 0