

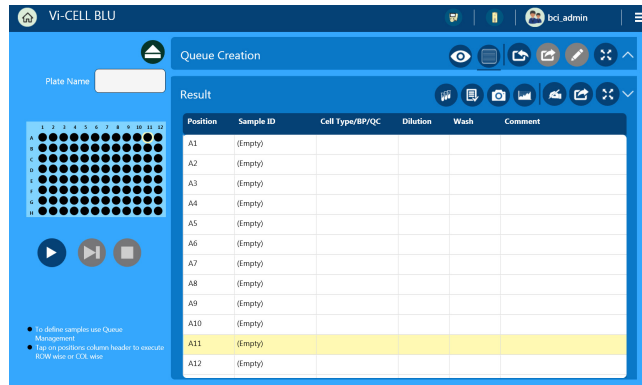


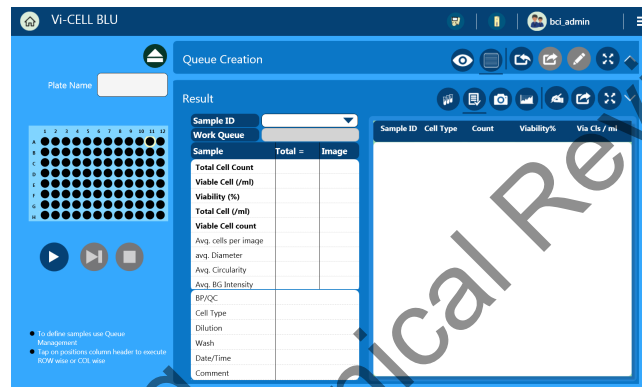
5 Select  to finish programming the 96 well microplate.

6 Select  to run the 96 well microplate queue.

7 Plate results list.



8 Plate sample results.

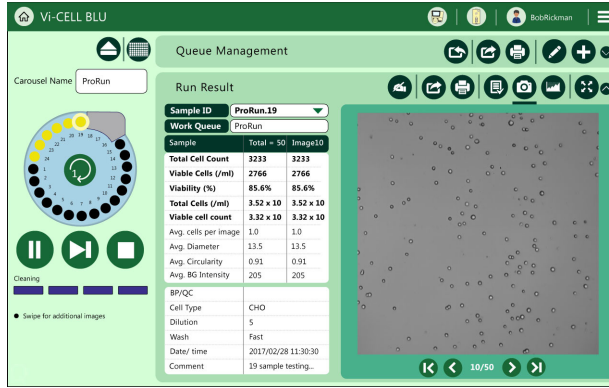


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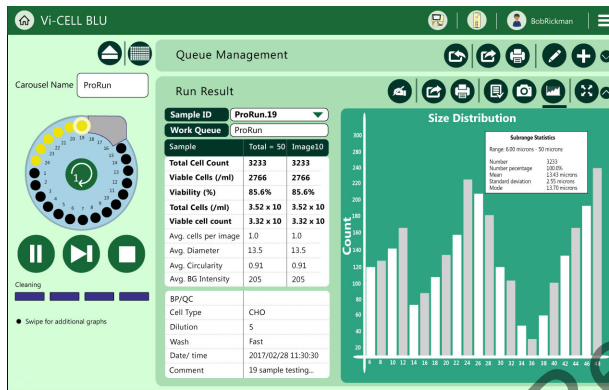
Run Results

Green Screens need to be replaced throughout

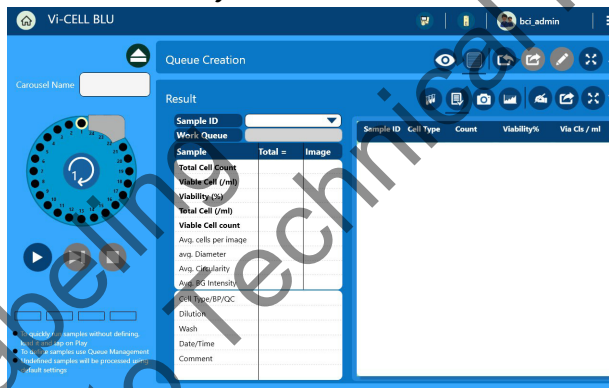
- Camera image results.



- Graphical results.

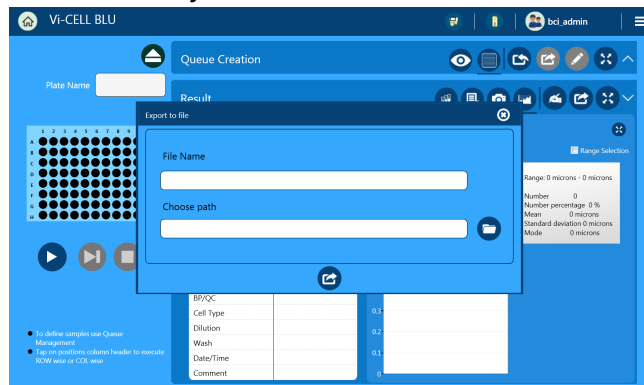


- Carousel cell type, count and viability results.



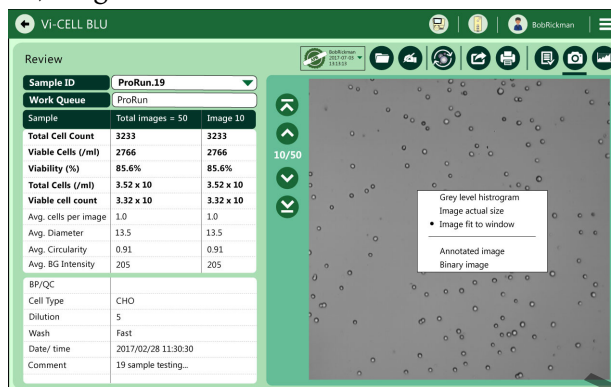
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- Plate cell type, count and viability results.



Camera Image Options

- Grey level histogram, Image fit to window.

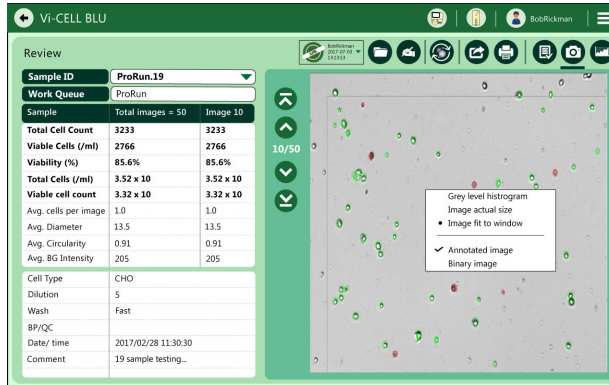


- Grey level histogram, Image actual size.

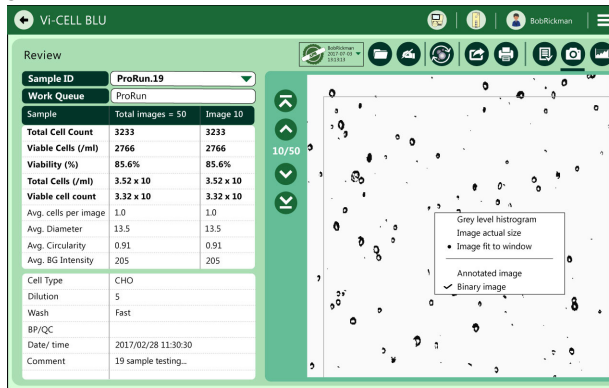


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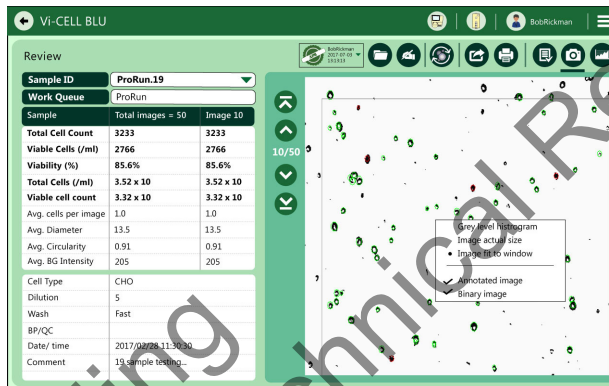
- Annotated image, Image fit to window.



- Binary image, Image fit to window.

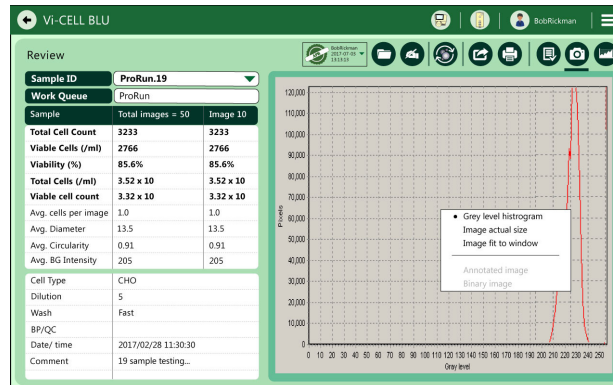


- Annotated and Binary image, Image fit to windows.



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- Grey level histogram.



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Bioprocess Results

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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 = $(\ln V2 - \ln V1) / (t2 - t1)$

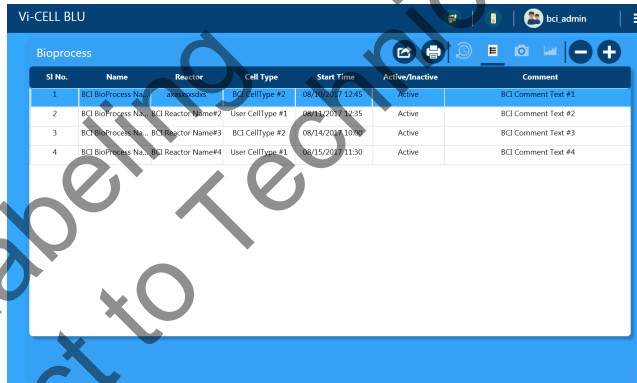
Doubling time in hours = $\ln 2 / \text{Growth rate per hour}$

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

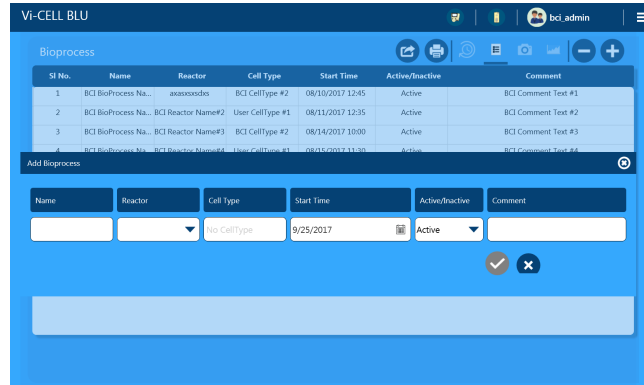
- Bioprocess list results.



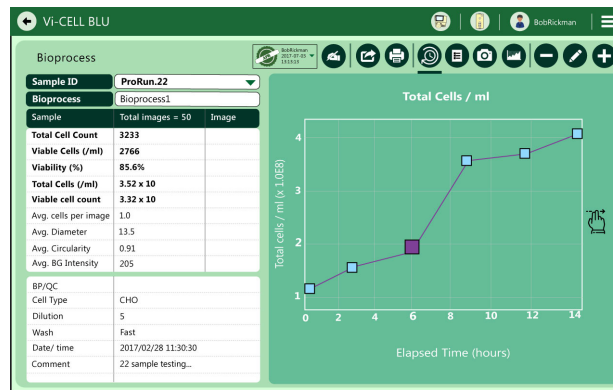
The screenshot shows the Vi-CELL BLU software interface with a table titled "Bioprocess". The table has the following columns: SI No., Name, Reactor, Cell Type, Start Time, Active/Inactive, and Comment. There are four rows of data.

SI No.	Name	Reactor	Cell Type	Start Time	Active/Inactive	Comment
1	BCI BioProcess Name1	BCI Reactor Name1	User CellType #2	08/12/2017 12:45	Active	BCI Comment Text #1
2	BCI BioProcess Name2	BCI Reactor Name2	User CellType #1	08/14/2017 10:35	Active	BCI Comment Text #2
3	BCI BioProcess Name3	BCI Reactor Name3	BCI CellType #2	08/14/2017 10:30	Active	BCI Comment Text #3
4	BCI BioProcess Name4	BCI Reactor Name4	User CellType #1	08/15/2017 11:30	Active	BCI Comment Text #4

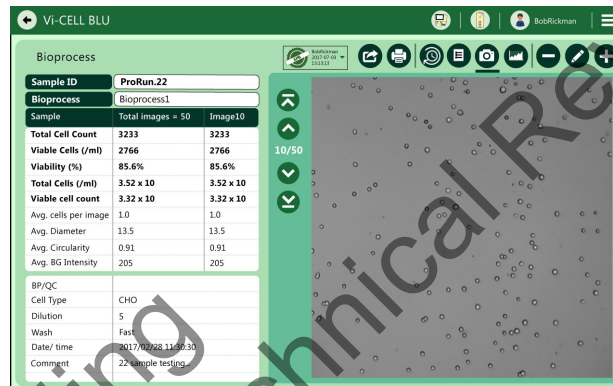
- Add Bioprocess screen.



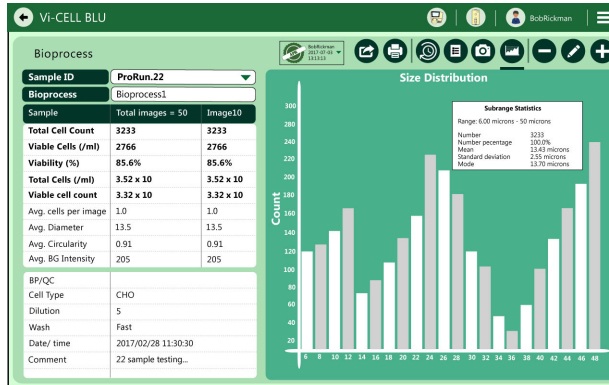
- Bioprocess Total Cells/mL results.



- Bioprocess camera results.



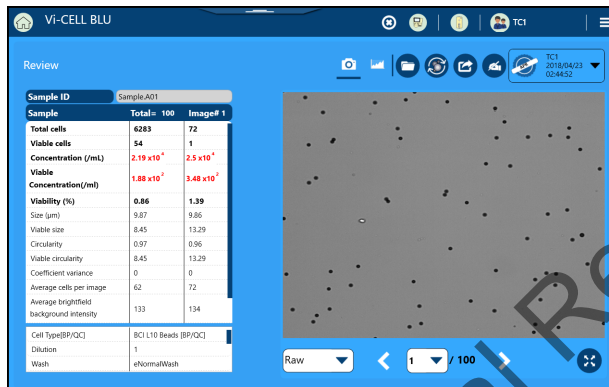
- Bioprocess size distribution results.



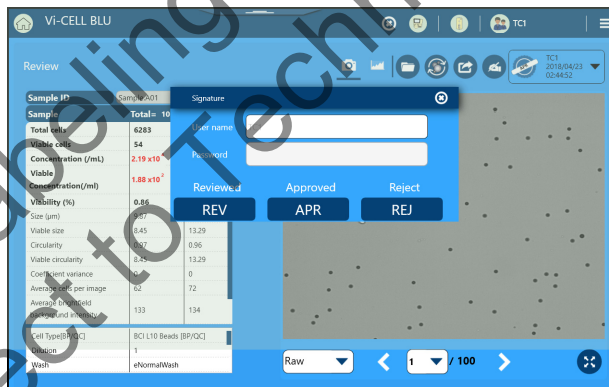
Signoff Results

Green Screens need to be replaced throughout

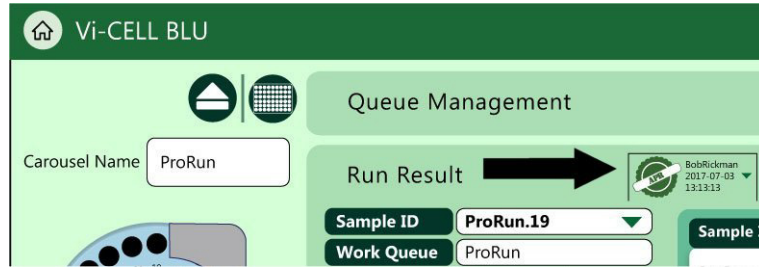
- 1 When Security is enabled, you need to select  to signoff results after sample processing.



- 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.




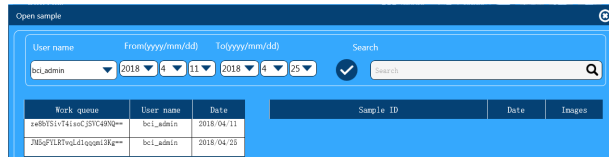
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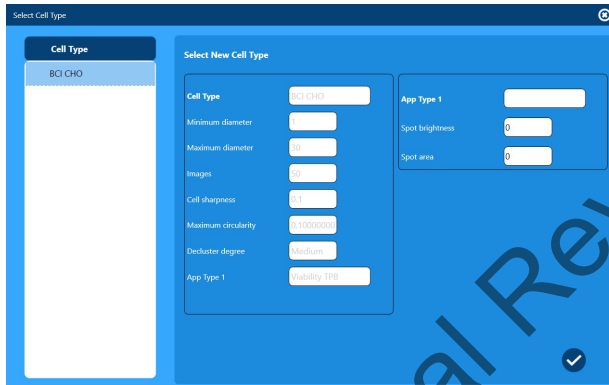
Reviewing/Reanalyze Data

1 Select  and  to choose a file to review.

2 Select a sample to review or reanalyze and select .



3 If desired, change the Cell Type,.



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