
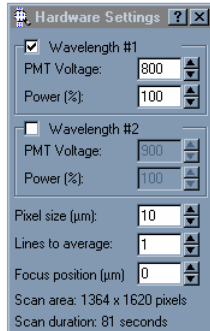



## User guide for Microarray fluorescence scanner

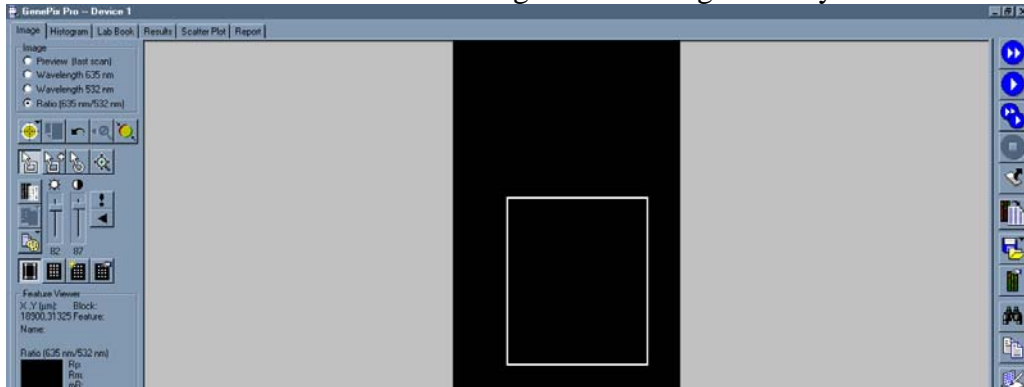
1. Login the PC (UserID: Gregstep16 Password: Gregstep16)
2. Double click on the GenePix Pro 3.0 control program




3. Click on **Hardware settings** , in the panel. Select the appropriate PMT and power for the Cy3 (Wavelength 532 #2) and Cy5 channel (Wavelength 635 #1).

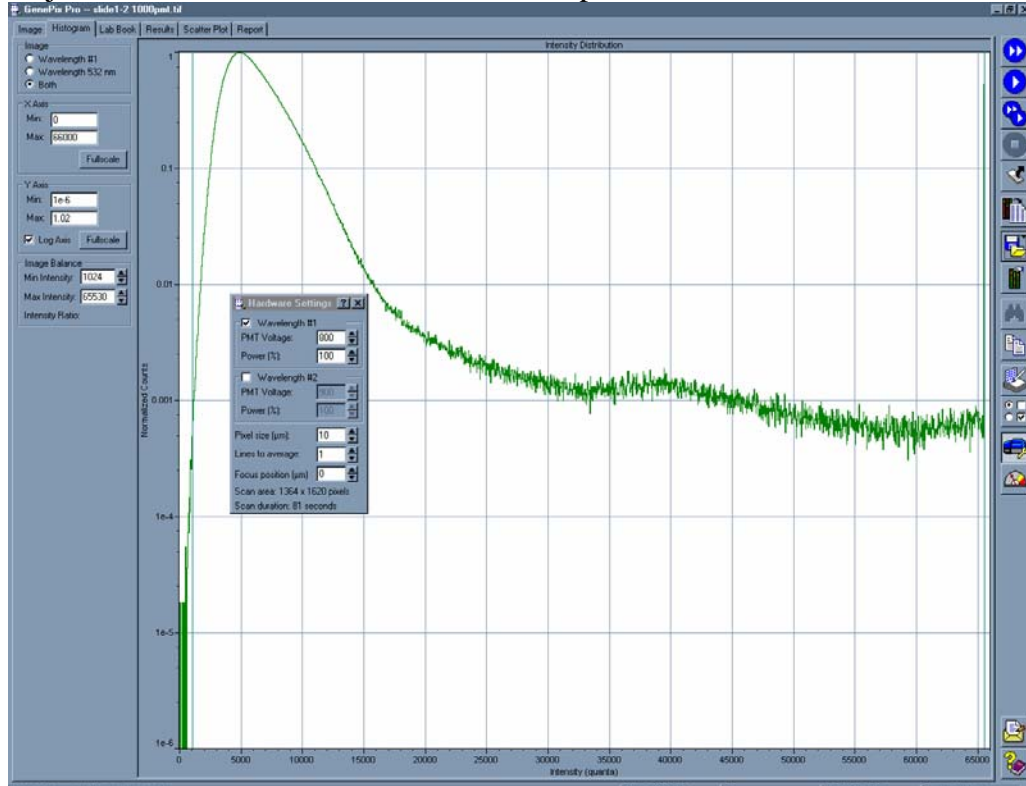


4. Click on **Preview scan**  to determine the area of slide to be scanned.
5. Click on **Scan area** tool to create the region containing the array features




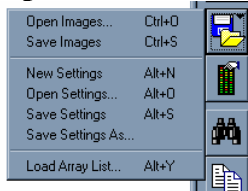
6. Click on **Data scan**  to obtain high resolution scan for data analysis



- The **Intensity ratio** of the array (Cy3/Cy5) can be observed in the Histogram tab. Adjust the PMT Gain in each channel and repeat data scan until this ratio is ~1.0.



- Once the array has been scanned, the next step is to save the image. click on

**Open/Save** icon  and save the image in Tiff format.



- In order to obtain the fluorescence reading of the features, click on **Open/Save** icon  and select the appropriate genePix Array List (GAL) file (*Load array list*) that imports the position and identity of each feature on the microarray
- Click on **Analyze** icon  to extract the data from each feature and the result will be sent to the Results tab spreadsheet. The data can then be saved for further

## computation.

The screenshot displays the GenePix Pro interface. The main window shows a table of results for a slide named 'slide1-2 1000pmt.tif'. The table has columns for Flags, Block, Column, Row, Dia, F532 Median, F532 Mean, F532 SD, B532 Median, B532 Mean, and B532 SD. The data is as follows:

Flags	Block	Column	Row	Dia	F532 Median	F532 Mean	F532 SD	B532 Median	B532 Mean	B532 SD
1	1	1	1	1080	6798	6965	1638	7009	7455	2645
1	2	1	1080	5328	5421	1684	5389	5530	2188	
1	1	2	1080	8334	8429	1597	8764	8925	2040	
1	2	2	1080	6423	6547	1770	6525	6959	4181	
1	1	3	1080	7996	8251	2850	8282	8506	2006	
1	2	3	1080	5962	6007	1189	6059	6154	1384	

Overlaid on the bottom right is a 'Save Results' dialog box. It shows the save location as 'may 12 2006'. The file list contains 'slide1.gpr' and 'slide1-2 1000pmt.gpr'. The 'File name' field is 'slide1-2 1000pmt.gpr', and the 'Save as type' is 'GenePix Results Files (\*.gpr)'. The 'Comment' field is empty. The 'Naming' section has several options: 'User Name prefix' (unchecked), 'Barcode prefix' (unchecked), 'Date prefix' (unchecked), and 'Numeric suffix' (unchecked). The checkbox 'Save a JPEG image containing all analyzed features' is checked.

11. Delete obsolete data by pressing “Shift + Delete”. Please note that the file would not be recoverable in the **Trashbin**.