Pyroprint Data Analysis

- 1. In Pyromark, open your file of interest. Click on the blue arrow (at the top under "Reports") and click "Analyze all wells". This compensates the data.
- 2. Do a little QC
 - a. Check each well for "Low Peak Height" or "Wide Peaks" or "Possible dispensation error" messages in the Well Information box at the right. Do not worry about other messages. Make note of wells with these messages.
 - b. Look at the blue peak height section. You can make it wider and higher by pulling edges out. Look for shoulder peaks. Make note of wells with shoulder peaks and at which dispensation they occurred.
- 3. Save compensated program in the 3-0-3 DATA Pyromark xml files folder.
- 4. Under "Tools", export peak heights. Leave buttons marked as is (All wells and row), and save as a .csv file in 4-0-0 ANALYZED DATA in the appropriate folder.
- 5. Open Excel.
- 6. Open Peak Height file of interest (.csv file). It should open with a pop-up box that allows you to get peak height data into a usable Excel format.
- 7. Click "delimited", then next, and then "semicolon", and then Finish. Type the names of your samples in the appropriate wells where rows are labeled A1 through to the end (C8 if you have 24 samples).
- 8. Go to Tools; Data Analysis; Correlation. For input range, select all columns including the name row and each dispensation row. Click on "Rows" and "Label in First Row".
- 9. Multiply values in the cells by 100 by selecting a cell underneath the grid, type "=", click in the box above (ex. B3), then type *100, and enter. Drag the right corner down and across the multiply all the values from above. Copy this new grid and paste above using "paste special" and "values".
- 10. Now delete grid below, and all the 0s and 100s in the grid above by using Replace. Click on Options. Find 0, replace with nothing; be sure to select "Match entire cell contents" (you don't want to delete every zero on the page, just those in the cell by themselves).
- 11. Save this as an .xls file, and delete "peak height report" and ".csv" from the name.

Primer 5

- 1. Open Primer 5.
- 2. Open .xls file of interest.
- 3. Click on similarity matrix.
- 4. Unclick "show title" (if you don't, the data doesn't load).
- 5. Analyze with CLUSTER in the Analyze pull down.
- 6. Keep "Plot Dendrogram" and Group Average checked.
- 7. Save plot dendrogram as a bitmap.
- 8. Go back to the Excel file, and "insert-- from file" the plot dendrogram just generated.