Lab: Preprocessing and quality control

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For this lab, you will use the estrogen package, the simpleaffy package and the affyPLM package.

Exercise 1.

- > library(estrogen)
- > openVignette("estrogen")

This contains exercises for Affymetrix preprocessing, rudimentary quality control, up to the production of a gene list. Working through these exercises should take you 20-60 min, depending on your experience with R and the affy package. If you have brought your own data, process it in a similar way.

Exercise 2. Load the simpleaffy package and repeat the QA procedures there. First use the qc function to compute the necessary values and then try out some of the quality measures. Are there any unusual arrays?

Exercise 3. Load the affyPLM package and compute RLE and NUSE. Plot these and again determine if there are any unusual arrays. Do the results from this exercise agree with those from Exercise 2?