Statistics For Genomics – Reading Assignment 2
Due: May 2nd At the Beginning of Class

Read the papers (available from the class website):

(1) “Automated gating of flow cytometry data via robust model based clustering”
(2) “Per-channel basis normalization methods for flow cytometry data”

Briefly Answer Each of These Questions:

(1) What are the advantages of automated gating versus manual gating?
(2) In the first paper, why do the authors use a mixture of t-distributions rather than a mixture of normal distributions for clustering? What is the difference between the t-distribution and the normal distribution?
(3) In the second paper, how do the authors identify landmarks? How do they register peaks?
(4) Can you think of some potential problems with the landmark registration and alignment algorithm?