WHAT IS STABILITY?

- how a machine learning algorithm performs if data is perturbed
  - looking for robust algorithms - does not produce a wildly different result for very small change in the input data
- types of perturbation considered here
  - alter every feature (gene) by some amount (test I)
  - alter a subset of features by some amount (test II)
    - best way to select the features? (test III)

STABILITY TEST 1

- represents an error in calibration of equipment
  - same effect across all genes
- p = {0, 0.05, … 0.95, 1.00}
- For each gene, g
  - g’ = rand(g - g*p , g + g*p)