

Multiple testing in large-scale gene expression experiments

**Statistics 246, Spring 2002
Week 8, Lecture 2**

Outline

- Motivation & examples
- Univariate hypothesis testing
- Multiple hypothesis testing
- Results for the two examples
- Discussion

Motivation

SCIENTIFIC: To determine which genes are differentially expressed between two sources of mRNA (trt, ctl).

STATISTICAL: To assign appropriately adjusted p-values to thousands of genes, and/or make statements about false discovery rates.