



The E-M Algorithm for Maximizing Likelihoods

Biostatistics 666



Previously...

- Properties of Estimators
 - Unbiasedness
 - Consistency
 - Efficiency
 - Sufficiency
- Introduction to maximum likelihood
 - Examined simple likelihood functions



Haplotypes are important!

- Phase may determine phenotype
 - E.g., individual with two mutations in CFTR:
 - Normal, if in the same copy
 - Affected, if in two different copies
- Phase helps exploit linkage disequilibrium
 - Infer state of neighboring alleles
- Phase helps determine identity-by-descent status