General Genetics

Biology 184
Fall 2007

Instructor: Dr. Tom Peavy
Genetics Course Website is on WebCT!!

Access:

1) Quick Links on the CSUS homepage
http://www.csus.edu/

2) Bookmark the WebCT website
https://online.csus.edu/webct/logonDisplay.dowebct

3) Go to Dr. Peavy's faculty website
   a. Through the department
   b. Through CSUS faculty listing

Lecture Material

• Molecular Genetics
  (Replication/ Transcription/ Translation)

• Chromosome Structure & Abnormalities

• Mendelian Genetics & Linked Genes
Human Genome Project

The National Center for Biotechnology Information

Pigmentation gene, dark allele

Transcription and translation

Highly functional pigmentation enzyme

(a) Molecular level

Pigment molecule

Wing cells

Lots of pigment made

(b) Cellular level

Pigmentation gene, light allele

Poorly functional pigmentation enzyme

Wing cells

Little pigment made

(c) Organismal level

Dark butterflies are usually in forested regions.

Light butterflies are usually in unforest regions.

(d) Populational level
Evolution By Natural Selection