

IB 201 Genetics and Evolution

Terms from lectures 11-15

Development

Recapitulation

serial homology

homeotic genes

Homeobox

Hox genes

MADS box genes

Homeotic mutants

Regulatory hierarchy

Target gene

tagmosis

Karl Ernst Von Baer

Ernst Haeckel

Johann Wolfgang von Goethe

Richard Owen

Richard Goldsmith

Steven Jay Gould

Sean Carroll

Species and Speciation

species

race or subspecies

morphological species concept

phylogenetic species concept

biological species concept

mate recognition concept

cohesion species concept

speciation

allopatry (allopatric speciation)

sympatry (sympatric speciation)

parapatry (parapatric speciation)

peripatry (peripatric speciation)

species isolating mechanisms

(pre-mating and post-mating)

Natural Selection

Darwinian natural selection

Darwinian fitness

chance variation

phenotypic variation

genotypic variation

reproductive success

artificial selection

adaptation

preadaptation

phenotypic plasticity

genotype by environment interaction

Sexual Selection

Evolving Pathogens

resistance

evolutionary arms race

Red Queen interactions

antibiotic

horizontal (lateral) gene transfer

bacterial transformation

transduction

conjugation

transposons

plasmid

strong selection

coevolution

virulence

horizontal transmission

vertical transmission

HIV and AIDS and AZT

CCR5- Δ 32 allele

Polio vaccine theory for spread HIV-1