Evolution of Model Organisms and the DNA Molecular Clock

Intracellular Models
- Biochemistry
- Molecular Biology

Multicellular Models
- Embryo Development
- Genetic Physiology

Human Disease Models
- anatomy / toxicology
- neurological / viral

Million Years Ago

Average Change in DNA

“Protein” DNA
- 32%
- 16%
- 8%
- 4%
- 2%
- 1%
- 0.5%

“Neutral”/Non-coding DNA
- 75%
- 56%
- 40%

“16/18S rRNA” DNA
- 71%
- 50%
- 32%
- 20%
- 10%
- 5%