

# Interactive questions

Lecture 1: Introduction to the genome

Correct answers are in green.

## Q1b

# How was the human genetic linkage map constructed?

- A. We target a marker / RFLP (e.g. “P”) and start sequencing from this site
- B. We focus on other genetic diseases and find a linked marker
- C. We find other markers that link with “P” and examine the order of these markers
- D. We use genomes from better characterized organisms (e.g. mouse) as a “genetic” guide

# Does cM represent a constant value accros organisms?

- A. Yes, the recombination frequency along chromosomes is constant independent of organism
- B. Yes, it is constant for all multicellular organisms, but differs from that of bacteria
- C. No, the cM value is different in each organism, but is constant along chromosomes
- D. No, the cM value is dependent on the organism and on the chromosomal region

# Human genome is largest genome so far sequenced

- A. Yes
- B. Yes, but others are almost as big
- C. No, we have found genomes that are 10-fold larger or more
- D. Don't know

# The “humanzee”, can apes and humans (theoretically) interbreed?

- A. No, because they are genetically too distinct
- B. No, because the sperm cannot penetrate the egg membrane
- C. A humanzee could be generated, but would be sterile
- D. Yes, both species are compatible