

Carl Bergstrom - Meiotic Drive

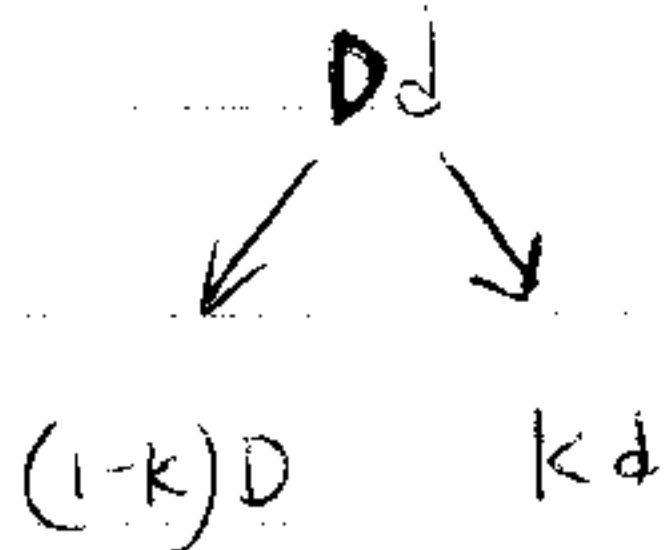
Why is environmental sex determination so rare?

① too difficult?

② vulnerable to environmental fluctuation

③ gene level selection - may prevent/limit it

Meiotic Drive

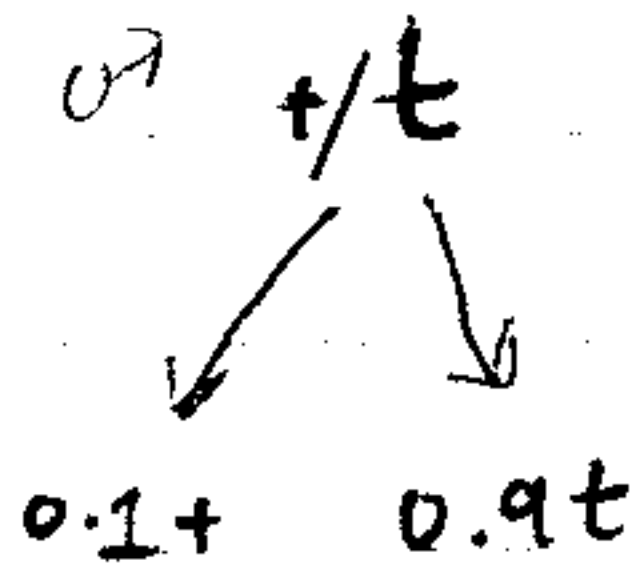


- bias only occurs in one sex

- alleles are located on chromosomal

inversions where recomb. does not occur

e.g. t haplotype in *M. musculus*



ENVIR. SEX DETERMINATION \rightarrow GENETIC SEX DETERMINATION \rightarrow X & Y \rightarrow X DEGENERATES

How could meiotic drive happen?

~~Doesn't~~ ~~mean~~

Do meiotic alleles kill all other alleles

- Biased gene conversion

- Unrecognizable by mismatch repair strand recognition

