

BIO 4AE3 · Sep 5

ecology · incidence/prevalence
(geographic range)

how do we know?

case reports

surveys

contact tracing

deaths, wills, ...

· serosurveys ·

internet trends

evolution ~ changes in genotype
frequency between
generations

mutation

drift

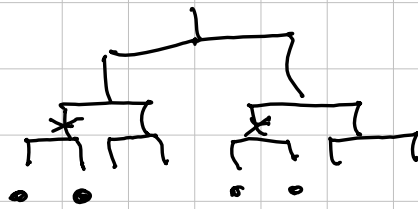
selection

COEVOLUTION

what kind of data?

genomic ·

PHYLOGENETICS/
comparative method



parasite

· ancient DNA ·

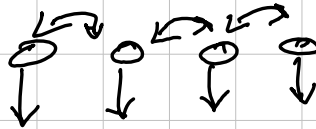
INFECTIOUS DISEASE/PARASITES

disease · departure from
'normal' functioning

infectious disease

transmissible

HORIZONTAL transmission



SYMBIONT / symbiosis

"close association"

· ENDOSYMBIONTS ·

~~Symbiont~~

PARASITE: symbiont that
reduces its host's fitness
(but doesn't kill)

	<u>harms</u>	<u>kills</u>	<u>benefits</u>
close assoc	parasite	parasitoid	symb mutualist
NOT close	grazer	predator	free living mutualists