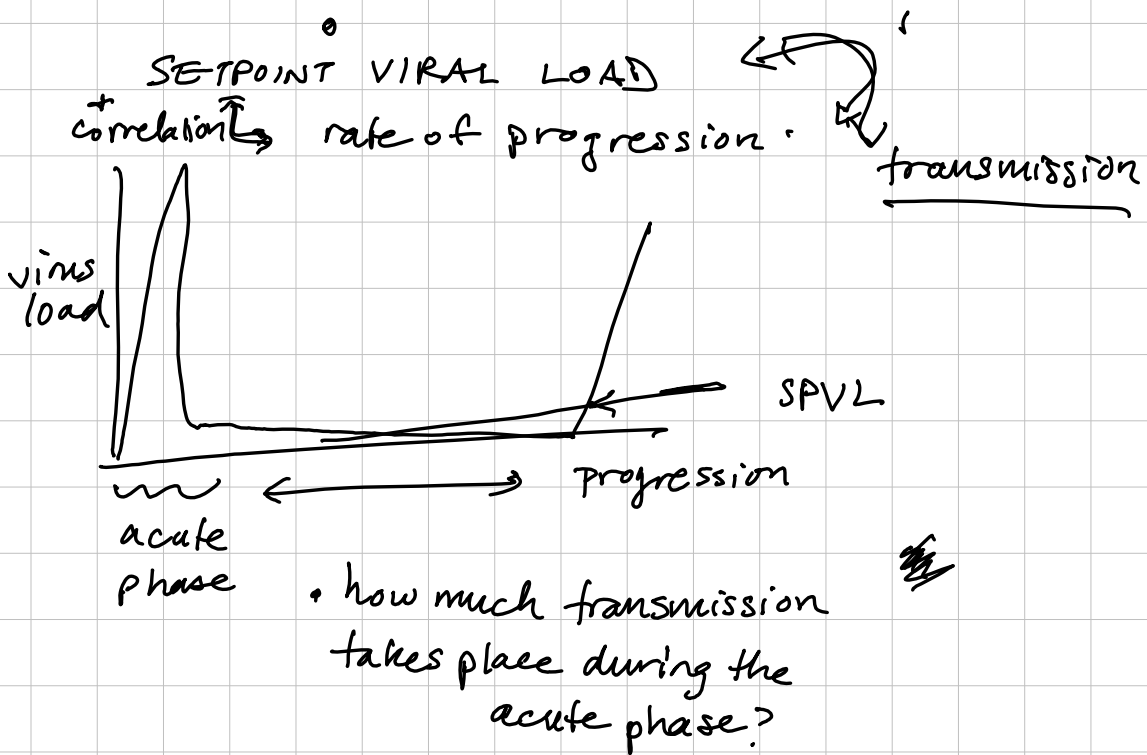


BIO 4AE3

case study 1 - myxomatosis

2 - HIV



• RAKAI, UGANDA

• Serodiscordant couples.

(monogamous?) couple

respiratory viruses
(SARS-COV-2)

virulence INCREASE

'wildtype', α , δ , ω

alpha, delta, omega

infection fatality rate (IFR)
case fatality rate (CFR)

deaths
'reports'

α , δ higher virulence (higher R_0)
 ω . lower virulence (higher R_0)

TRANSMISSION MODE.

vector borne > direct transm.

'necrotransmission'

environmental > direct

within-host competition
(coinfection)

• TRANSIENT virulence.

epidemic phase selects ^{for} SPEED
($\beta - \gamma$)

endemic phase selects for R_0