Chapter – Coinfection

Lit. Review

* theory historically focussed on the one-host, one-pathogen paradigm and the interactions
* while this has lead to many importance advancements (dose response, …) in wild systems it is common to find multi-parasitised hosts and multi-host pathogens.
* with the pathogens and hosts co-occurring
* this complexity often leads to deviations from the theorised expectation derived from modelling just one pathogen in one host
* within-host interactions (e.g. competition, facilitation and priority effect) can alter between-host interactions (e.g. transmission, …. ) …. Alternations in pathogen replication, probability of infection (of one or both pathogens), host survival and clearance/ immune response all lead to downstream changes in infectivity and persistence of a pathogen at a community level
* scales: individual (within-host), population (between-host) and community

---- Timing of infection // Infection sequence ----

Sequential infection

Simultaneous infection

Priority effect

---- Immune response ----

Ranavirus

? raises the question of whether

>>> Infectivity >>>

Transmission

Shedding

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