

KEY CHALLENGES IN PREDICTING VIRUS REASSORTMENT IN VITRO AND A FEW OTHER THINGS

CATHERINE BEAUCHEMIN

I will introduce 3 experimental assays which, together with a mathematical model (MM), enable us to extract the rates or timing of key steps in the virus replication cycle. I will highlight the MM's limitations in specifically describing infection with Bunyavirus, pointing to the corresponding knowledge gap(s). I will suggest a few possible solutions. If time permits, I will discuss ongoing efforts with Jessica Belser (US CDC) to link the in vitro infection properties of over 125 influenza A viruses of mammalian and avian origin to their infection phenotype (e.g. lethality, weight loss, transmission rates) in ferrets.