

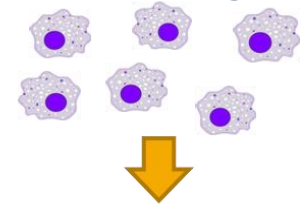
# Investigating differential expression in avian innate immune responses to respiratory viruses

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## Chicken lung leukocytes to screen anti-viral innate responses

Isolation of chicken lung leukocytes



NDV Clone 30 (attenuated vaccine)

Mock (uninfected)

AIV H7N1 (low pathogenic)

R848 (TLR7 agonist)



IBV M41 (pathogenic strain)

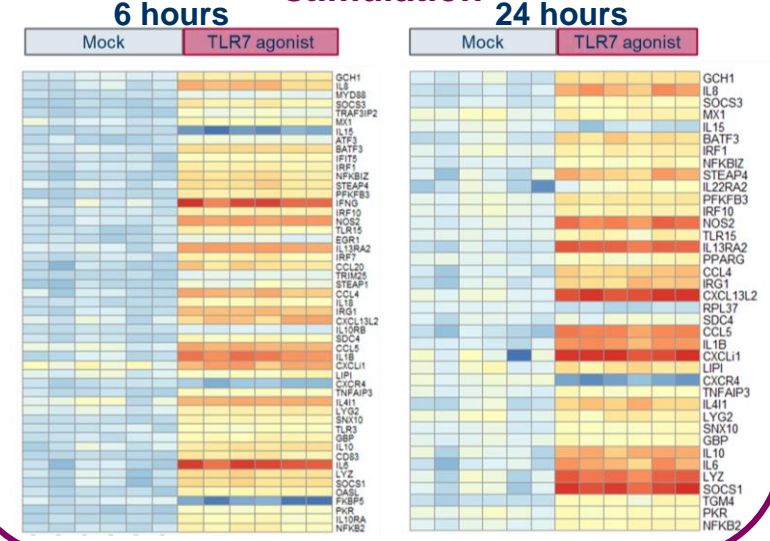
IBV H120 (attenuated vaccine)

RNA ~ 6 hours, 24 hours and 48 hours

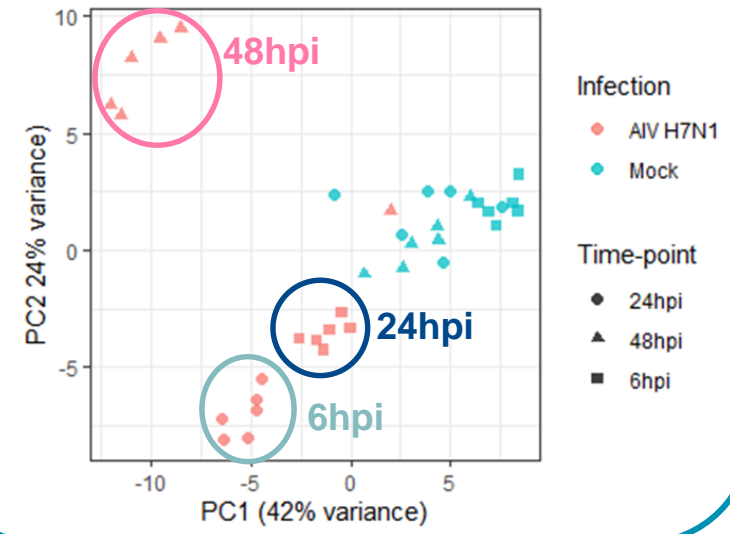
Anti-viral innate immune response (qRT-PCR 96.96 IFC Fluidigm)



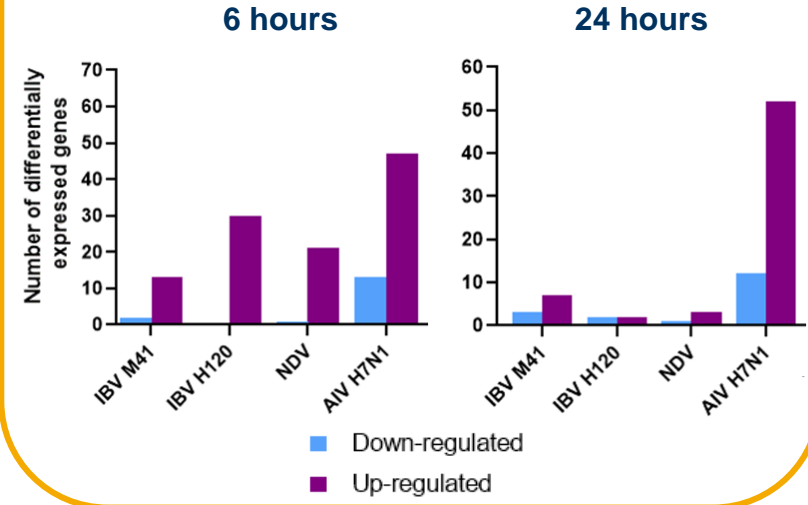
## Mimicking viral responses with TLR7 stimulation



## Kinetics of response to AIV infection



## Rapid decline in responses to IBV and NDV infection



## Shared and unique genes linked to different viruses

