## Influenza virus in ferrets



- Highly pathogenic avian
  Influenza (HPAI) is a notifiable
  disease (BSL-3)
- Humans less susceptible to AI due to difference in receptor for HPAI
- Ferret similar receptor as humans
- Suitable for human pathogenesis studies on Influenza
  - Test mutants on virulence



## Study design: Influenza virus in ferrets





- Ferrets of variable age
- Housig facilities suitable for several groups and large numbers of animals
- Several HPAI or LPAI viruses available
- Intranasal / intratracheal inoculation under anaesthesia
- Monitoring clinical disease



- Clinical symptoms
- Body temperature
- Body weight



## Parameters: Influenza virus in ferrets

- Virology
  - Virus replication on throat swabs ans organs (by titration or PCR)
- Immunology
  - Serological responses
  - Cell-mediated responses
- Pathology
  - Gross and histo-pathology



