

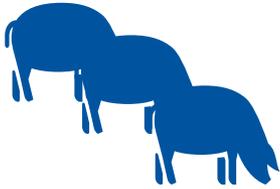
# Influenza Virus in pigs



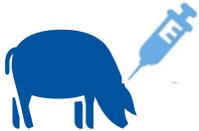
- Swine Influenza Virus is a BSL-2 organism
- Human Influenza strains can originate from swine
- Pigs relevant host to study swine Influenza as well as human Influenza outbreaks
- Vaccination challenge studies
- Pathogenesis / Virulence studies
- Transmission studies

# Study design:

## Influenza Virus in pigs



- High health or SPF pigs
  - 9 weeks old
  - No (maternal) antibodies against Influenza



- Several groups of up to 10 animals
- Intranasal inoculation by nebulization
- Several virus strains available
  - $H_1N_1$ ,  $pH_1N_1$ ,  $H_3N_2$ ,  $H_1N_2$
  - Different geographical locations



- Clinical observations
  - Clinical symptoms: signs of illness
  - Rectal body temperature

# Parameters:

## Influenza Virus in pigs

- Virological assays
  - PCR detection, virus titration,
- Serological assays
  - Virus neutralization, haemagglutination inhibition, seroconversion
- Samples
  - Oropharyngeal & nasal swabs, tissue samples, blood, broncho-alveolar lavage, air samples
- Pathology
  - Gross pathology, (immuno)histology

