

# Influenza Vaccine & Therapeutic Testing

Southern Research's experts can assist with preclinical drug discovery and development of therapeutics and vaccines for influenza—delivering the highest quality, full-service research to support the pharmaceutical and biotechnology sectors. Our scientists are also experienced in GLP-compliant safety and efficacy testing in small and large animal models.



## FACILITIES

- o A/BSL-2 & A/BSL-3 laboratories
- o GLP facility
- o NHP housing capacity
  - 332 NHPs in A/BSL-2
  - 48 NHPs in A/BSL-3

## PRE-CLINICAL ANIMAL MODELS

- o H1N1/H3N2 and HPAI mouse and ferret influenza model
- o NanoLuc H1N1 mouse influenza IVIS model (tracking the virus *in vivo*)
- o Knockout (KO) mouse influenza models (therapeutics & vaccines with selective sensitivities)
- o PK/PD/Efficacy medical countermeasure studies against LPAI and HPAI (A/BSL-3)

## ANTIVIRAL ASSAYS

- o CPE assays
- o Cytotoxicity assays
- o Virus load reduction assay
- o *In vitro* drug combination assays (synergy/antagonism with standard drugs)
- o *In vitro* virus neutralization assays
- o H5N1 (A/BSL-3) *in vitro* screening & virus neutralization

## MECHANISM OF ACTION/ MOLECULAR TARGET

- o RNA-dependent RNA-polymerase mini-genome transcription inhibition
- o Human dihydroorotate dehydrogenase (DHODH) inhibition
- o Cellular/biochemical assays for viral and host targets



Learn more about influenza vaccine & therapeutic testing.

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