

IDRC: Engineering of African swine fever virus using synthetic biology to accelerate vaccine development



ILRI is employing Nobel-price winning technology

10 new modified viruses produced using CRISPR Cas9 **WHAM!**

Knock-out of the CD2v gene confers some attenuation
Cell line adapted wild-type virus is still pathogenic in pigs – **GOOD!**

Facts

Budget : 1,600,000 USD (ILRI)

Donor: IDRC / CGIAR

Partners: J. Craig Venter Institute (US) and Friedrich Loeffler Institute (DE)

Duration: Nov 2019 – Jan 2022

Cost extension: most likely 12 months

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The project in short

- Genetically modification of African swine fever virus (ASFV).
- Testing of attenuated ASFV in pigs.
- Immunization with modified ASFV and protection experiments.

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