

Dated:10.05.2021

Call for interested industrial partners to work in collaboration with ICAR-NRCE for developing Coronavirus vaccine

- 1. Theme of Collaborative project: Development of Coronavirus vaccine**
- 2. Name of the Institute: ICAR-National Research on Centre on Equines (NRCE)**
- 3. Ownership of the know-how/technology: Indian Council of Agricultural Research (ICAR)**

Section 1: Contact Information

4. Contact details:

- **Name: Dr. Yash Pal**
- **Title: Director, NRCE**
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Section 2: Technical Description

5. Details of know-how:

The ongoing pandemic of a new coronavirus diseases 2019 (COVID-19) has become a health emergency of international concern. The etiological agent is a novel coronavirus, called severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). SARS-CoV-2 has been shown to infect cat, dog, lions and minks. Mortality due to SARS-CoV-2 infection has also been reported in minks and lions. Whereas extensive research efforts have been made for human vaccine against COVID-19, very less attention has been paid to develop COVID-19 vaccines for animals.

Our laboratory has isolated SARS-CoV-2 from nasopharyngeal swabs from COVID-19 positive human patients and has been deposited to NCVTC repository with an Accession Number of VTCCAVA294 (SARS-CoV-2/India/2020/Hisar/4907). The virus has been passaged 70 times in Vero cells and its genome has been completely sequenced at passage (P) levels- P0, P10, P30, P50 and P70. Virus is growing at a titer of $>10^7$ PFU/ml. Recently, we also isolated SARS-CoV-2 from the second wave of COVID-19 (SARS-CoV-2/India/2021/Hisar/177405). In order to protect the animals from SARS-CoV-2 infection, development of vaccine is need of hour. We believe our SARS-CoV-2 isolate(s) have been sufficiently characterized and may be exploited to develop inactivated vaccine for immunoprophylaxis against SARS-CoV-2 infection in animals/humans.

We are seeking collaborations with the industry for developing inactivated Coronavirus vaccine for suitable large-scale production and its further evaluation as per standard guidelines.

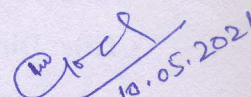
6. Terms and conditions

Terms and conditions will be decided after mutual discussion with the interested industrial partner following ICAR Guidelines.

Section 3: Certifications and approvals

It is certified that the above information about the research outcome nominated for transfer is correct and no security sensitive/confidential and proprietary information has been provided.

Last date of submission of response by interested industry partner: 10.06.2021

A handwritten signature in blue ink, followed by the date "10.05.2021" written diagonally.

I/c ITMU

ICAR-NRCE, Hisar