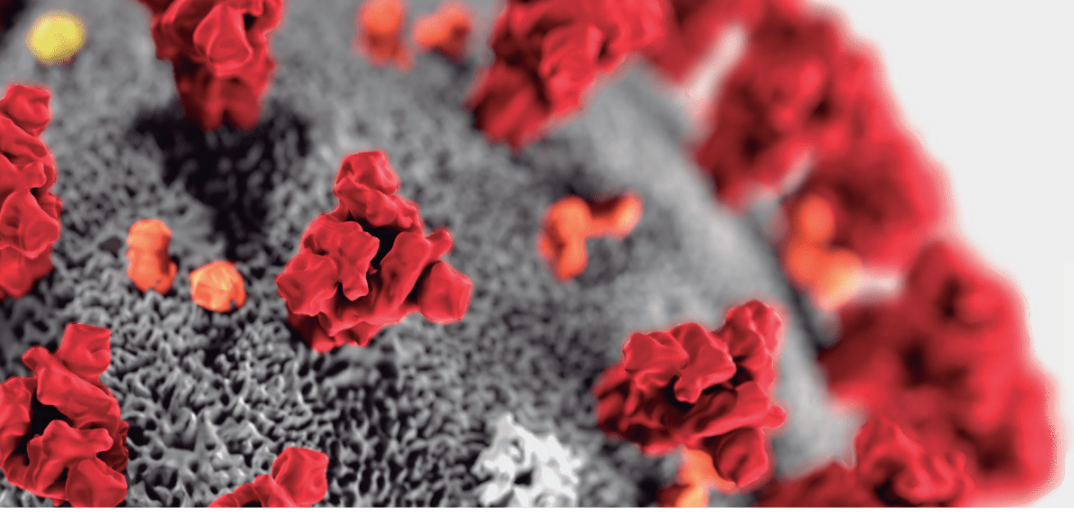

INNOVATIONS IN COVID-19

Bridging opportunities
at Oswaldo Cruz Institute

DEVELOPMENT OF A DIAGNOSTIC METHOD FOR DETECTING THE SARSCOV-2 VIRAL PARTICLE USING ALTERNATIVE ANTIBODIES

(COD. 2020.037)

COORDINATOR

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RESEARCH AREA

Diagnostic

DEVELOPMENT STAGE

Level 3 - TRL - Analytical and experimental critical function and/or characteristic proof of concept. MRL - Manufacturing proof of concept developed.

PROPOSITION / APPLICATION

The project seeks to solve the problem in the diagnosis of the disease. The current most effective method for detecting the virus takes two to five days to release the results; also, it is expensive and can only be performed in centres that have a RT-PCR equipment available. The method of detecting positive antibodies to SARS-CoV-2 showed increased numbers of false negative diagnoses and, in terms of precision, it is impaired in relation to the momentary spread of the virus by the individual.

INNOVATION

Development of a test consisting of an antibody considered cheaper when compared with the available commercial tests and its production is more suitable for bioethical issues when compared to mammalian IgG. In addition, the present proposal aims at viral detection without using molecular biology, but rather an antigen-antibody bond.

OPPORTUNITY

Development of a test in the ELISA format for the detection of SARSCoV-2, which has the advantage of reducing cost and time compared to RT-PCR, thus increasing sensitivity and specificity in relation to rapid tests. In addition to being of great value in the epidemiological research of the infection and in the actions to be taken to isolate infected individuals, the test in question helps with the issue regarding the disseminators of the disease.

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