

Scientists to culture novel coronavirus in human lung epithelial cell

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New Delhi, May 04 (India Science Wire): Centre for Cellular and Molecular Biology (CCMB), Hyderabad has tied up with a Bengaluru-based company, Eystem Research Private Limited, to take up research activities on COVID-19. Through this research collaboration, an attempt will be made to grow novel coronavirus in human cell lines, which will enable *in vitro* testing of potential drugs and vaccines against the COVID-19.

The research team will use Eystem's human lung epithelial cell culture system provided as part of its Anti-COVID Screening (ACS) platform to understand the molecular and pathological characteristics of the novel coronavirus, with a view of establishing a rational basis for testing potential drugs *in vitro*, said CCMB scientists.

"Culturing the virus outside the human host is a technological challenge that needs to be overcome. Eystem's cell culture system expresses the ACE2 receptor and other genes that are key determinants of viral entry and replication. We hope that employing this system will allow the CCMB team led by Dr. Krishnan Harshan to grow the virus predictably and thereby open up the potential for the drug screening and vaccine development strategies", said Dr. Rakesh Mishra, Director, CCMB.

CCMB is a constituent laboratory of the Council of Scientific and Industrial Research (CSIR) known for its cutting-edge research work on cellular and molecular biology. Eystem Research Private Limited is a cell therapy start-up incubated at the Centre for Cellular and Molecular Platforms (C-CAMP), Bengaluru. C-CAMP is an initiative of the Department of Biotechnology, Ministry of Science and Technology.

Dr. Jogin Desai, CEO, Eystem, expressed hope that CCMB will be able to leverage its platform and advance COVID-19 research that will help the country. "The ACS platform has been developed by Dr. Rajarshi Pal and his team and is a testament to our depth and expertise in cell therapy and disease modeling," he said.

Eystem is working to democratize access to cell therapy as well as disease modeling platforms and bring their benefit to a large section of humanity, added Dr. Desai. (India Science Wire)

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