

## CSIR-IMTECH to have biorepository of COVID-19 samples

By Jyoti Singh

Twitter: @ashajyoti11

New Delhi, Jul 10 (India Science Wire): The Microbial Type Culture Collection and Gene Bank (MTCC) at the Institute of Microbial Technology Chandigarh (IMTECH) will host the biorepository of COVID-19 samples. The institute will store clinical samples of COVID-19 patients for research.

The blood samples collected will be stored at a designated biorepository centre. These blood samples may be used to assess the performance of antibody tests as well as immune markers of disease and disease severity for COVID-19.

The centre has been identified as one of the 16 national COVID-19 biorepositories by the Government of India for collecting, storing, and maintaining clinical samples of positive patients. Data obtained from the patient and related to the blood samples he/she provide will be recorded using a unique study identification number. Any publication arising from this study will maintain the patient's anonymity by excluding all information that could potentially identify the person.

Some studies indicate the viral load, that is the number of virus a person has at the time of the onset of the symptoms, is linked to the severity of the disease. Those with lesser viral load are said to suffer only a mild to moderate COVID-19 disease, while in case of the patients who become critical the viral load is said to be as high as 60 times. Nevertheless, there is no clear evidence for it. The samples will help researchers understand the early predictors of disease severity and how it develops given the immune response and other factors. The selected biorepositories will collect different samples like oropharyngeal swab / throat swab, nasopharyngeal swab / nasal swab, bronchoalveolar lavage, sputum, blood, urine and stool.

"The biorepository will be critical to steer research towards innovating the development of new diagnostics, therapeutics, and vaccines," said Dr Sanjeev Khosla, Director, IMTECH Chandigarh. If by ~~somehow~~ somehow, we can identify who will suffer only a mild COVID19 and who may become critically ill, then appropriate medical attention could be provided. The data stored in the repository would help researchers to identify potential markers.

CSIR-IMTECH has also been authorised to share the samples with academia, industry, and commercial entities after scrutinising the purpose of the request and ensuring benefit to the country. The Indian Council of Medical Research (ICMR) has asked all states to provide access to COVID samples to the designated biorepositories across the country.

Various research institutes, academic organisations, pharmaceutical, biotech, and food industries involved in microbiological and biotechnological research regularly approach MTCC for microbial cultures and other microbiology-related services.

"The biorepository at CSIR-IMTECH will collect the samples, transport, aliquot, store and share them as per standard operating procedure," said Dr Khosla.

The MTCC at CSIR-IMTECH, where the samples will be stored, is a national facility established in 1986 and recognised as an International Depository Authority (IDA). (India Science Wire)

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