

DBT-inStem makes video on `simple pooling` method for COVID-19 testing

New Delhi, July 27: The Department of Biotechnology's Institute for Stem Cell Science and Regenerative Medicine (DBT-inStem) and the National Centre for Biological Sciences (NCBS) are working hand in hand with the State Government of Karnataka to test for COVID-19 since April, 2020. The two institutions entered into a partnership with the Azim Premji Foundation (APF) in late May to augment their testing efforts.



This collaboration aims to develop new and innovative testing methodologies that will speed up the testing process to maximize the number of samples tested in an efficient manner, in addition to providing free-of-cost testing to a section of people. As part of this engagement, an instructional video was prepared to demonstrate the use of the technique of `simple pooling` in testing, which can minimize costs and maximize the number of tests.

In locations where there is low prevalence of infection and asymptomatic cases and consequently most of the samples test negative, the `simple pooling` strategy reduces time for COVID testing and also saves reagents and resources. The technique involves random pooling of five samples each from a cohort of samples followed by RNA isolation and RT-PCR. If the pooled tubes show negative results for COVID infection by RT-PCR, all the samples corresponding to the pooled tubes are reported as `negative`. However, if any pooled

tube tested 'positive' for COVID infection, the five samples which were part of the tube are re-aliquoted and RT-PCR is performed on individual samples to identify the positive samples among them.

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