

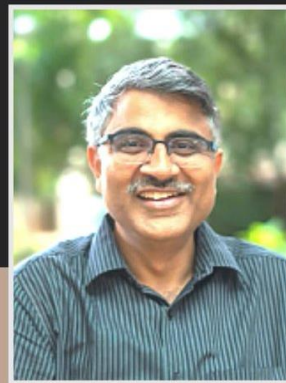
DBT-inStem hosts session on 'tapestry pooling' method for COVID testing

New Delhi, Nov 25: DBT- Institute for Stem Cell Science & Regenerative Medicine (DBT-inStem) is one of the founding partners of COVID-Gyan, a pan-institutional website that has been proactive in COVID-19 outreach effort ever since the pandemic surfaced in India. The constant effort of COVID-Gyan has been to create necessary awareness with proper scientific backing about COVID, busting the myths and bringing in the ongoing research across the country.

WebGyan: an Ask Me Anything about Tapestry Pooling for COVID-19 Testing



Manoj Gopalkrishnan



Dasaradhi Palakodeti

November 12 | 8pm IST

Tapestry Pooling is a smart pooling method for qPCR testing that has been jointly developed at IIT Bombay, NCBS Bangalore, and inStem Bangalore. It allows 10x increase in testing throughput and gives individual results in a single round! In this Ask Me Anything session, learn about Tapestry Pooling from two of the principal investigators, and **ask them all your burning questions about this method!**

On Nov 12, 2020, a WebGyan #AskMeAnything session was organised, moderated by Dr. Uma Ramakrishnan of NCBS-TIFR. It hosted Dr. Dasaradhi Palakodeti of DBT-inStem and Dr. Manoj Gopalkrishnan of IIT-Mumbai who spoke about their collaborative venture – 'Tapestry Pooling' for effective COVID testing. In this unique session, the speakers primarily addressed the questions from the audience.

Tapestry Pooling is a novel quantitative non-adaptive single step pooling scheme to test up to 1,000 samples at once using the same amount of reagents that are normally employed for running only 100 samples. The underlying molecular diagnostic test is any real-time RT-PCR diagnostic panel approved for the detection of the SARS-CoV-2 virus.

In cases where most samples are negative for the virus, Tapestry accurately identifies the status of each individual sample with a single round of testing in fewer tests than simple two-round pooling. This testing method was developed as an Android application called 'BYOM Smart Testing', which guides users through the pipetting steps required to perform the combinatorial pooling. The results of the pooled tests can be fed into the application to recover the status and estimated viral load for each individual sample.

The algorithm developed by Dr. Manoj Gopalkrishnan at IIT Mumbai and Dr. Sandeep Krishna of NCBS, Bangalore has been experimentally tested – involving matrices of increasing complexity and samples of known status – by Dr. Dasaradhi Palakodeti, inStem. This one-hour session is available to watch on [BLiSC YouTube channel](#) and was [live tweeted](#) on DBT-inStem's Twitter handle.

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