BioSpectrum the business of Bio & Health Sciences

C-CAMP continues finding solutions to beat COVID-19

27 April 2020 | News

6 picks from Week 4 of C-CAMP COVID-19 Innovations Deployment Accelerator

C-CAMP COVID-19 Innovations Deployment Accelerator (C-CIDA) in its Week 4 has selected 6 companies with solutions that are making headway in addressing the COVID-19 pandemic.

These are Eyestem for a novel screening platform for anti-COVID-19 drugs, Kerasiev - a technology to control viral contaminants in waste water, Innaumation for therapeutics approaches, Pluss Technologies for cold chain support for viral swabs, R. R. Animal Healthcare for surface sanitisation and DNAXperts for an indigenously developed rapid diagnostics kit.

While a few of these companies are ready to deploy immediately, some will be in the game longer with platform technologies in areas that hold immense potential for impact in India and globally.

Dr Taslimarif Saiyed, CEO & Director, C-CAMP, the founding organization of C-CIDA has said “In fact, C-CIDA Week 4 line up of Stars reflects the diversity of solutions being put forth by Indian startup community. These are not mainstream but bold, holistic approaches. Even if not investor-friendly, technologies such as these are a huge bet for us as a society right now. The scale is not just India but the world.”

C-CAMP launched C-CIDA in late March and since then it has attracted nation-wide response with more than 1000 submitted innovations from all over India and interestingly, some from overseas. The call has earlier selected 25 top innovations in its first three weeks. With this batch of 6 the number climbs to 31! Many more are expected to be announced in the coming weeks.

As C-CIDA enters its second month, the Accelerator has diversified its portfolio from the immediate and urgent necessities to novel and experimental approaches that in the long-run can change the face of the outbreak in India and the world. A few of these products are already in the market. C-CIDA will now facilitate quick deployment by Government and private sectors so that the pandemic can be contained and more lives can be saved.

The Round-up this Week has Eyestem Research, a C-CAMP incubated Bengaluru startup in the regenerative therapy space. They have developed human lung progenitor cells as a novel drug screening platform for Covid-19.

Scientists are proposing several therapeutic options to help curb SARS-Cov2, some repurposed, some brand new and some radical. We need stable, scalable and reliable drug screening platforms which can act as fool-proof test beds in the lab before

a full-fledged clinical trial. The margin for error is very slim from the safety and efficacy point of view even with the current emergency situation. Eyestem's solution is a pluripotent stemcell based cellular system that consists of first-generation alveolar epithelial cells in an air-liquid interface. These lung organoids can be used for rapid high-content drug screening to identify potential candidate drugs more easily. The platform technology if successful can potentially transform how drugs are being screened in COVID-19 experiments the world over.

Kerasiev is a Kolkata-based startup that has developed a ceramic membrane-based bio hazardous wastewater filtration plant that can be used to reduce the viral load in waste water generated at COVID-19 quarantine centres and hospital wards.

A study in France has recently found traces of the Coronavirus in sewage water. A couple of studies from different countries are even exploring the COVID-19 epidemiological possibilities from testing wastewater. The problem of viral contamination of environment through untreated waste is very real and remains unaddressed. Kerasiev is a ceramic porous membrane that can block the SARS-Cov 2 virus in suspension. The ceramic based membrane has a shelf life of 10 years and is also compatible with assembly structure of current sewage treatment plants for easy integration. The technology is a first-of-its-kind in India and can be an exciting control method to prevent COVID-19 contaminated effluents from percolating into the larger ecosystem.

Innaumation is a Bengaluru-based startup is developing India's first convalescent plasma therapy to go into Phase I clinical trials. Plasma therapy is an experimental procedure that is currently being tested in various countries and has been permitted for use in clinical trials in various Indian states by ICMR. An immunotherapy drug for treating severely ill COVID-19 patients is also in Innaumations' pipeline.

Pluss Technologies is a Gurugram-based startup with a temperature controlled packaging product called Celsure. Celsure uses a novel phase change material to maintain temperatures between 2 to 8 degrees C for upto 120 hours. This can be a game changer in current cold chain support systems for biologicals including viral swabs.

Hyderabad based RR Animal Healthcare Ltd is a perfect example of a startup repositioning a candidate innovation for COVID-19. Their surface disinfectant for poultry farms, RH+ is a broad spectrum antimicrobial effective against all coated viruses and bacteria. Enhanced with potent sterilising components, the product can be an ideal surface sanitising solution in multiple settings including infection hotspots, hospitals etc.

DNA Xperts, a Noida based startup's Covido is an indigenously developed fast, real-time PCR kit for Cov-2 RNA detection. It takes less than an hour to test. As per ICMR guidelines, testing will form the core of India's response in the coming days of the pandemic. Locally made and locally sourced testing kits like Covido will strengthen India's testing capacity and help in controlling the scale of transmission.