

C-CAMP picks deep science technologies to fight COVID-19

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C-CIDA announces Week 3 Stars with deep science technologies to impact India's Coronavirus battle



COVID-19's rampage continues unabated the world over. As India shifts gear in its own battle against the coronavirus C-CAMP COVID-19 Innovations Deployment Accelerator or C-CIDA has chosen 7 new deep science technologies that are likely to play a role in containing the spread.

C-CIDA Week 3 line-up features startups that target critical gaps in screening, monitoring, diagnostics and novel approaches in therapeutics by employing cutting-edge science of AI/ML, stem cell research, ultrafast molecular assays, cloud-based mobility and other such top-of-the-line techniques.

The seven startups are Docturnal (Hyderabad), Salcit (Hyderabad), Predible (Bengaluru) and Alkenist (Bengaluru) in the AI/ML based pre-screening and monitoring technologies, Stempeutics (Bengaluru) for their novel approach in therapeutics, Huwel Life Sciences (Hyderabad) for rapid diagnostics and Ubiquare Health (Bengaluru) in telemedicine support.

While some of these startups have repurposed their innovations to suit the need of the hour, a few are venturing into uncharted territory with deep science technologies that are risky but hold immense potential for impact if successful. Such innovations require handholding support from the ecosystem.

C-CAMP as an enabler of deep science innovations will connect them with funding opportunities including grants and investments, help navigate regulatory pathway, provide Government and industry connects for scaling up and the likes, through this C-CIDA platform. The goal is to foster as many of these innovations as possible towards faster on-ground deployment.

Going forward, C-CIDA partners Action COVID-19 Team or ACT, Social Alpha and C-CAMP are slated to fund a few select high-risk technologies through grants and investments.

C-CIDA, a COVID-19 focused innovations accelerator aimed at identifying and accelerating innovations that are near-ready for deployment was set up by C-CAMP so that emergent technologies can be provided the required inputs to create real impact during this very challenging time. Launched on 26th March the running call had earlier selected eighteen innovations in the first two weeks. It has also received an overwhelming response of 900+ applications since its launch. This batch of

seven is therefore not the last. Many more are expected to be announced in the coming weeks.

There is at present no known cure for SARS-Cov2. However research by scientists the world over has thrown up Mesenchymal stem cells or MSCs as a potential novel approach in therapeutics for the severely ill. C-CIDA startup Stempeutics has developed a MSC product that has been already granted several regulatory approvals in the form of ODD and ATMP designations from the European Union. MSC based therapy is currently under clinical trial in Europe and Stempeutics is the only Indian / Asian stem-cell therapy solution being tested alongside companies from Israel, USA and Europe.

Week 3 startups Docturnal, Salcit, Predible and Analytek are all pre-screening and monitoring tools rooted in deep learning AI/ML algorithms. As the pandemic expands beyond local transmission, it is absolutely essential to step on the testing pedal. But testing capacity is as scalable as resources and person-hours allow it to be. This can be augmented easily by the use of innovative pre-screening solutions. All 4 startups above can be used as an additional tool for appropriate triaging and detection of early COVID symptoms.

While Docturnal and Salcit are cough sound based pre-screening technologies, Predible and Aikenist are radiology (CT scans and X-rays) - based. All four offer real-time analysis through big data analytics opening up avenues for an initial prognosis. If confirmed COVID-19 positive through conventional diagnostic methods, these technologies can be come in handy with their continuous closed-loop monitoring and home care capabilities.

Huwei Lifesciences Pvt Ltd is an indigenous ICMR approved, NARI validated real-time qualitative PCR kit for quick diagnostics. With all molecular reagents and diagnostic consumables made in-house they are a 100% Make-in-India startup. Their ultrafast and sensitive chip-based PCR can handle large volumes at ease making rapid and confirmatory diagnosis affordable and accessible.

Ubiquare Health is cloud-driven digital healthcare platform that offers telemedicine support to post-acute or chronic patients from home. Hospitals the world over are infection hotspots for the contagious Cov-2 virus and frequent hospital check-ins for such immune-compromised patients is extremely risky. Plus the healthcare system is far too stretched at this time to provide such patients the support they need. Ubiquare's cloud-based platform topped off by a network of quality healthcare specialists virtually brings the hospital to home. Its dashboard can also be easily integrated for COVID-19 patient management in asymptomatic or mild cases or in post-infection recovery stage.