



FIND and CSIR-IGIB partner to strengthen genomic surveillance of SARS-CoV-2 in India

- The partnership will serve to optimize and scale the capacity needed to identify SARS-CoV-2 variants of concern (VOC) and variants of interest (VOI)
- It will also serve to identify genomic hotspots, and mutations associated with disease severity that are critical for surveillance and public health action

New Delhi, India – 3 December 2021. FIND, the global alliance for diagnostics, has partnered with <u>CSIR-IGIB</u> (Institute of Genomics and Integrated Biology) to aid India's fight against COVID-19 by boosting sequencing capacity across the country. The partnership aims to decentralize genomic surveillance of SARS-CoV-2, down to the district level by setting up "MicroLabs" that enable sequencing, analysis and interpretation of sequencing data with minimal turnaround time and infrastructure limited settings.

While the challenges associated with COVID-19 have been pervasive across the globe, the pandemic has also spurred on-the-spot innovation. As a co-lead of the Diagnostics Pillar of the Access to COVID-19 Tools (ACT) Accelerator, FIND is supporting India's efforts towards establishment of a robust genomic surveillance system. With the second wave of COVID-19 highlighting the importance of focusing on hard-to-reach and rural populations, point-of-care genome sequencing is essential to track the evolution of the virus.

The emergence of Omicron, designated a VOC by the World Health Organization (WHO) on 26 November 2021, has reiterated the need for enhanced sequencing capacity, which remains pivotal in tracking new variants and informing accurate tests and appropriate treatment. Point-of-care genome sequencing is designed to combine scale, speed and sensitivity, and is expected to become a gold standard for vigilance, analysis and control of pathogen spread. In addition to supporting public health decision making for COVID-19, building point-of-care sequencing capacity will have far reaching implications for short- and long-term pandemic preparedness.

Dr Sanjay Sarin, Vice President, Access at FIND said: "Omicron has shown us just how vital genomic sequencing is – for monitoring the evolution of the SARS-CoV-2 virus and identifying emerging mutations rapidly to inform public health action locally and globally. Building on our track record of strengthening diagnostic capacity in India as well as our established sequencing programme at FIND, this partnership with CSIR-IGIB will bring sequencing capabilities closer to patients, which means faster response times that can help keep everyone safe."

Dr Rajesh Pandey, Principal Scientist, CSIR-IGIB said: "MicroLabs based genome sequencing of pathogens would take labs to the people, allowing for rapid variant detection and prioritising sequencing of clinically relevant samples. This would advance a 'hub-and-spoke'

model of genomic surveillance, comprising both – MegaLabs (high-throughput sequencing) and MicroLabs (high-priority sequencing). This is especially important as we make progress towards monitoring the ports of entry for possibly tracking of Omicron entry to India. In addition to VOC, understanding the genomic mutations underlying vaccination breakthrough is also equally important and merits tracking through network of MicroLabs."

Prof Anurag Agrawal, Director, CSIR-IGIB said: "Such efforts are important towards making India better prepared for genomic surveillance of pathogens, with trained genomics manpower, data management and data sharing."

The partnership will provide strategic guidance to incorporate next-generation sequencing into broader national disease surveillance frameworks and inform data analyses, management and sharing based on global data policies and guidelines. It will provide a platform for knowledge-sharing and lessons learnt to inform national capacity building efforts and policy guidance.

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About FIND: FIND, the global alliance for diagnostics, seeks to ensure equitable access to reliable diagnosis around the world. We connect countries and communities, funders, decisionmakers, healthcare providers and developers to spur diagnostic innovation and make testing an integral part of sustainable, resilient health systems. We are working to save 1 million lives through accessible, quality diagnosis, and save US\$1 billion in healthcare costs to patients and health systems. We are co-convener of the Access to COVID-19 Tools (ACT) Accelerator diagnostics pillar, and a WHO Collaborating Centre for Laboratory Strengthening and Diagnostic Technology Evaluation. For more information, please visit www.finddx.org

About CSIR-IGIB: CSIR-Institute of Genomics & Integrative Biology (IGIB) is a premier Institute of Council of Scientific and Industrial Research (CSIR), engaged in research of national importance in the areas of genomics, molecular medicine, bioinformatics and proteomics. It aims to translate concepts developed in basic biological research to commercially viable technologies for health care. IGIB has been spearheading effort towards SARS-CoV-2 genomic surveillance in India. Towards this, it is working with pan-India network of clinical partners and other international organizations to understand and elucidate the different aspects of pathogen genome.

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