

Genomic leaders to create Australia's first national COVID-19 tracking system

16 September 2020 | News

CDGN & Illumina are collaborating to track COVID-19 using next-gen genomic sequencing technology



Illumina has recently announced that the Australian public health laboratories will aim to sequence the virus genomes of all positive COVID-19 tests in Australia and track COVID-19 using genomics across the country, rather than state by state, under a ground-breaking initiative spearheaded by Australia's public health laboratory organizations and leading industry partners.

The Communicable Disease Genomics Network (CDGN) and Illumina are collaborating to track COVID-19 using next-generation genomic sequencing technology, which enables real-time data sharing and integration to better understand the transmission and spread of the virus. Coordinated by the CDGN, this will be the first national implementation of pathogen surveillance and a critical step forward in Australia's pandemic response.

The Australian Government has provided an AUD \$3.3M Medical Research Future Fund (MRFF) grant through The University of New South Wales (UNSW) Sydney's School of Medical Sciences. As part of the research project, Illumina has further contributed more than AUD \$2M worth of its genomic sequencing systems and related consumables.

UNSW Conjoint Professor Bill Rawlinson, the Senior Medical Virologist, said the research project will address the urgent need for national implementation of COVID-19 genomics in Australia.

US based Illumina's systems are expected to be delivered next week to the Doherty Institute, Westmead Hospital, UNSW at the Prince of Wales Hospital and Queensland Health Forensic and Scientific Services, expanding the capacity of the four major public health laboratories in New South Wales, Victoria and Queensland to sequence pathogens, including COVID-19 samples.

Pathogen genomics can reveal information that would otherwise be missed, including rapid insights into the behavior, spread and evolution of COVID-19.