

Australia advances genomics research by introducing ultra-high throughput sequencer

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MGI and South Australian Genomics Centre introduce DNBSEQ-T7 to supercharge genomics research in Australia

MGI and South Australian Genomics Centre (SAGC) have announced their joint efforts to advance genomics research in Australia by introducing the country's first commercial ultra-high throughput sequencer DNBSEQ-T7, through MGI's local distributor Decode Science.

Based on MGI's proprietary DNBSEQ technology, the DNBSEQ-T7 is designed to deliver ultra-high throughput high-quality, reliable sequencing data at a fraction of the cost with a quick turn-around time. DNBSEQ-T7 can generate up to 6 TB of high-quality genomic data in 24 hours.

The ultra-high throughput sequencer is equipped with 4 Flow Cells, enabling high flexibility to run PE150 and PE100 samples simultaneously or separately to accommodate the needs of different projects. The versatile sequencer can support a wide range of applications in agriculture, multi-omics research, clinical whole genome or exome sequencing, metagenomics of complex microbial communities, biodiversity study, and more.

This state-of-the-art sequencer, as designed, is seamlessly integrated into SAGC's existing workflow. The data pipeline is powered by ZTRON Lite, a GDPR-compliant highly automated genomics data appliance dubbed "Sequencer Buddy" to provide a high-performance edge computing and storage solution to execute laboratory management, bioinformatics analysis, data governance, and data delivery.