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Now analyze genome on mobile app

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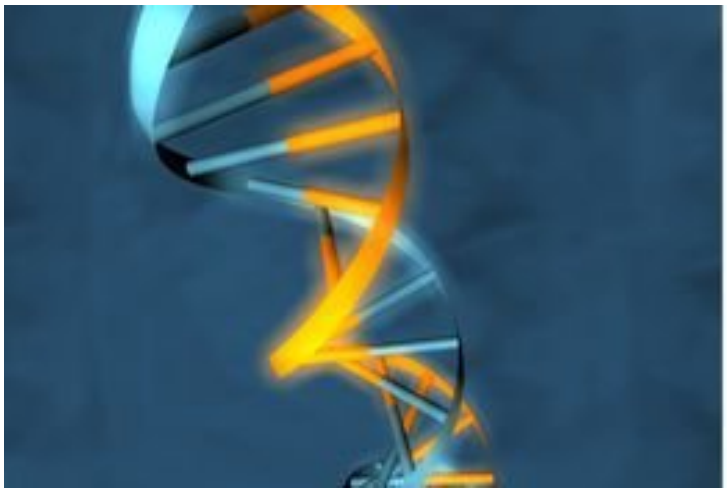

Singapore: PathGEN Dx today announced it has added the PathSEQ Virome application to Illumina's BaseSpace Apps, Illumina's dedicated applications store and informatics community dedicated to advancing genomic analysis. PathSEQ Virome enables researchers to rapidly identify viral genomes that are present in their MiSeq or HiSeq2500 sequencing results.

Prof Martin Hibberd, co-founder of PathGEN Dx said that, "This App is the product of PathGEN Dx's extensive knowledge of how to accurately fish out pathogen genome information from complex nucleic acid mixtures and builds on the success of the PathGEN PathChip pathogen detection system."

He also added, "The PathSEQ Virome App will enable users to identify viruses in a comprehensive and systematic way that will save them time and money. The output does not require specialist knowledge for interpretation and can be used to check for viral contamination, as well as virus detection, characterization and discovery. For a trial period, the App will be free of charge."

PathSEQ Virome allows BaseSpace users to understand the entire diversity of viruses which are present in their sample, typically in less than an hour (for sequence data files of approximately 1GB). The app filters sequencing data, matching it to a constantly up-dated virus database (currently containing more than 50,000 virus genomes), quality controlling it for false positives, and generating a PDF report identifying those genomes in the database that most closely match any virus sequences present in the sequenced sample.

The report identifies the strength of the overall genome match and can even give a confidence score to novel viruses (if related to any of the genomes in the database), while also identifying the genomic region of match. If multiple viruses are present in the same sample, they are combined into one report. PathSEQ Virome provides coverage for all known human-infecting viruses in human-derived samples, but does not yet support analysis of animal-derived samples.