

TEMPUS

SEQUENCING LAB

Launched in 2016, the Tempus Lab is a robotic laboratory optimized for high-throughput clinical next-generation sequencing with a current capacity of 100,000 samples annually.

Sequencing Options

- **Tempus|xT:** Targeted panel of ~600 genes (at 500x coverage)
- **Tempus|xO:** Onco-seq panel of ~1700 genes (at 500x coverage)
- **Tempus|xE:** Whole exome (at 150x coverage)

All sequencing includes RNA-seq capture and normal DNA. Sequencing is completed in approximately two weeks of receiving patient samples.

The laboratory features cutting-edge technology and robotic automation to maximize speed while efficiently delivering high-quality data. Special consideration has been given to workflow, security and air handling.



Illumina HiSeq 4000 sequencers: Our HiSeq 4000 production sequencers are Illumina's fastest and highest-throughput sequencers for use with multiple applications. They support Tempus' production sequencing.



Illumina NextSeq 550 sequencer: The NextSeq 550 is the newest desktop sequencer from Illumina. This sequencer provides the fastest turnaround times possible for the multiple applications that Tempus provides to our partners.



Illumina MiSeq sequencer: The MiSeq benchtop sequencer allows Tempus to perform sequencing runs with quick turnaround times for validation studies and resequencing of precious samples.



PerkinElmer SciClone NGSx automated liquid handlers: These liquid handlers have the largest number of validated NGS protocols on the market. Multiple units are dedicated to the pre-PCR and post-PCR areas of the Tempus Lab.



Covaris LE220 Sonicator: The fastest sonicator on the market allows Tempus to shear DNA eight times faster than previous models with the same high reproducibility.



JANUS® G3 Automation Workstation: JANUS® G3 Automation Workstations provide Tempus with real-time and future adaptability in throughput, capacity, and dynamic volume range from 0.5 µl to 5000 µl for consistent and reproducible sample preparation for complete, walk-away automation.



BioTek Cytation 5 multimode plate reader and imager: This reader provides Tempus with the flexibility to provide information on NGS quantification, well-based quantitative data, and automated phenotypic cellular information up to 60x magnification.



PerkinElmer Chemagic 360: Fully automated simultaneous 24- or 96-sample nucleic acid isolation and purification from all sample types: blood, saliva, fresh frozen tissue and FFPE tissue utilizing the latest bead-based technology in combination with a powerful electromagnet.



COLLEGE of AMERICAN
PATHOLOGISTS