We've built a state-of-the-art, CAP accredited and CLIA certified lab. Our highly robotic laboratory is optimized for high throughput clinical next-generation sequencing.

SEQUENCING

All sequencing includes whole transcriptome RNA-seq with validated fusion detection and matched normal DNA. Sequencing is completed in approximately two weeks from receipt of patient samples.

Tempus|xT

- Targeted panel of ~650 genes
- 500x average coverage

Tempus|xE

- Whole exome panel of ~19,000+ genes
- 250x coverage for clinical, and 150x coverage for research

Tempus|xF

- Liquid Biopsy of ~100 genes
- Average coverage of 20,000x (raw reads)/5,000x (unique reads)

Tempus|xG (powered by GeneDx)

- Targeted panel of ~52 hereditary cancer genes
- Average coverage of 500x

Our 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.

Clinical Laboratory Improvement Amendments

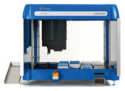
COLLEGE of AMERICAN PATHOLOGISTS

STATE-OF-THE-ART LAB EQUIPMENT

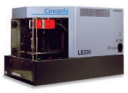
Illumina HiSeq 4000 sequencers: Our HiSeq 4000 production sequencers are used for multiple clinical applications and produce up to 1.5 Tb of data per run. They support Tempus' production sequencing.

Illumina NextSeq 550 sequencers: 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.

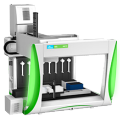
Illumina NovaSeq 6000 sequencers: The NovaSeq is Illumina's highest throughput instrument, capable of producing up to 6Tb of data per run. Tempus is using this instrument to produce whole exome data.



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.

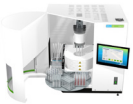


Covaris LE220 Sonicators: The fastest sonicators on the market allows Tempus to shear DNA eight times faster than previous models with the same high reproducibility.



JANUS® G3 Automation Workstations: 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 imagers: These readers provide 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 360s: Fully automated simultaneous 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.