

WESTERN SYDNEY UNIVERSITY



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UNIVERSITY

RESEARCH SERVICES

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NEXT-GENERATION SEQUENCING

Located at Western Sydney University's Hawkesbury Institute for the Environment, the Next-Generation Sequencing Facility offers Illumina's sequencing technology.

Service

- ≥ We are a leading NGS service provider with particular focus on metagenomic applications.
- ≥ Comprehensive support throughout the entire next-gen project including initial consulting service.
- ≥ Proven excellence in customer service with more than 100 successfully completed NGS projects from leading academic institutions and industry.

Quality Control

- ≥ At our facility, meticulous quality control procedures are embedded at various junctures within the pipeline, underscoring our commitment to safeguarding the integrity of the data we generate.
- ≥ Quantification utilizing fluorescent assays, ensuring precise measurement of nucleic acid concentrations.
- ≥ Sample integrity assessment of both DNA and RNA.

NovaSeq

- ≥ Versatile sequencing capabilities, operating in either single or dual flow cell modes, facilitating highly scalable sequencing outputs of up to 3Tb and 20 billion sequencing reads.

We cover a broad range of NGS applications including:

- ≥ Genomics: Whole genome sequencing
- ≥ Transcriptomics: Paired-end strand-specific RNA-Seq using Illumina Stranded Total RNA Prep with rRNA removal from multiple species using Ribo-Zero Plus

MiSeq

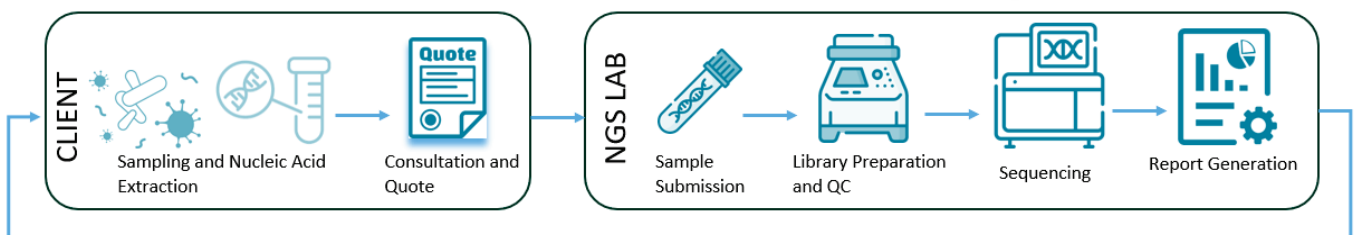
- ≥ The only service provider currently offering up to 384 multiplex samples per run.
- ≥ Average data output per run 19Gb (metagenomic 15Gb) with 2x300bp read length.
- ≥ Non-biased metagenomic approach using the normalized DNA input.
- ≥ Full service for your amplicon projects (bacterial and fungal).

Advantages of our Service

- ≥ Illumina Certified Service Provider (CSP) with proven customer service excellence.
- ≥ Highly reproducible results supported by fully automated standardized NGS procedures.
- ≥ Our modified protocols allow for improved library preparation from input materials of poor quality or with limited amounts.

Our People

- ≥ We are a skilled and passionate team dedicated to providing excellent service with an uncompromising approach to quality.



FOR FURTHER INFORMATION ON HOW TO ACCESS THE NGS FACILITY PLEASE CONTACT:

NGS@westernsydney.edu.au | (02) 4570 1784 | westernsydney.edu.au/research/centralised_research_facilities