## Leading the way in Lab Services



## At myDNA, our focus is on genetics, using cutting edge technology to give unparalleled service to our partners.

We are recognised globally for our outstanding expertise in genetics due to the calibre of our clinical team and our advanced, precision robotic automation. With over 20 years of genetic and lab expertise we offer a full suite of solutions.

Our services are constantly evolving to optimise the service we provide our clients to meet their needs and provide a seamless experience.

When it comes to delivery, we can provide:



**Faster turnaround times** 



Highly competitive pricing



High Capacity

#### What We Offer

We are not just a lab service; we offer end to end support. Our reporting is highly advanced and has been developed for effective communication of results, curated by our specialist team of computer scientists and bioinformaticians.



**Clinical Testing -** Clinical-grade testing services provided by our in-house NATA, CAP accredited and CLIA registered laboratory.



**Pharmacogenomic Testing -** Determine how a patient's genes may influence how they metabolize and respond to specific medications.



**Research Genetics -** Next-Generation Sequencing (NGS) and microarray services for dedicated researchers.



**Clinical Exome Reporting -** We offer a range of reporting solutions from Exome sequencing.

## One Company, Two Laboratories

We provide seamless, end to end services from Melbourne to Houston.



NATA accredited Laboratory, based in South Yarra, Melbourne CAP accredited and CLIA registered Laboratory based in Houston Texas providing high-tech robotic automation 7 days a week.



## **Our Biobanking Service**

We offer a DNA biobanking services to our customers and currently store over 5 million samples.



Our team is made up of dedicated clinical geneticists, clinical pharmacologists, molecular geneticists and pharmacists. To ensure seamless service the team collaborates across our NATA Accredited Lab based in South Yarra, Melbourne and our CAP accredited and CLIA registered lab, based in Houston, Texas.

## **Clinical Testing**

#### **CLINICAL TESTS**

Health & Disease Screening (316 genes)

Hereditary Cancer (113 genes)

Comprehensive Cardio Panel (175 genes)

Immunodeficiency (50 genes)

Parkinson, Alzheimer, Dementia (47 genes)

# Pharmacogenomic Medication Testing

#### PHARMACOGENOMIC REPORTS

myDNA Multigene PGx Test (11 genes)

myDNA Mental Health PGx Test (6 genes)

#### **ONCOLOGY TESTS**

DPYD PGx Test

UGT1A1 PGx Test

TPMT & NUDT PGx Test

DPYD & UGT1A1 (bundle)

#### **SINGLE MEDICATION TESTS**

Clopidogrel (single condition)

Voriconazole (single condition)



### **Our Experts**



A/PROFESSOR
LES SHEFFIELD
Founder, Clinical Geneticist
& Medical Director
MBBS, MSc, FRACP, HGSA,
Cert Clin Genetics



**DR. SAM MOSTAFA**Clinical Director
BPharm, PhD, AACPA



DR. KEITH BYRON
Laboratory Director (AUS)
BAppSci, MAACB,
FFSc(RCPA), PhD



DR. FENG ZHOU
Medical Laboratory
Director (USA)
PhD, HCLD (ABB), MB (ASCP),
and COQ (NYSDOH)



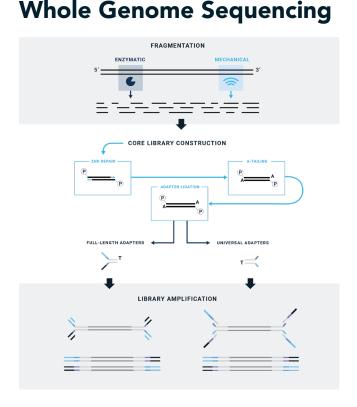
#### **NEXT GENERATION SEQUENCING (NGS) TECHNOLOGY**

(i) myDNA

Whole Exome Sequencing (WES) Whole Genome Sequencing (WGS)

Custom Panels





Whole Genome Sequencing (WGS) is a costeffective, high-throughput method to identify genetic variations. Whole Genome Sequencing is a go-to tool for research studies, trials, and genetic products. We provide services for any throughput level. Whether it's one sample or 10,000, we can process samples with speed. No batching requirements allow samples to begin processing the same day they are received.

- Twist Bioscience Library Preparation Enzymatic Fragmentation Kit 2.0
- 2 x 151 Paired End Reads
- Average 30x Coverage
- Fastq, VCF, or Imputation formats provided
- Metagenomic sequencing is also available

## Whole Exome Sequencing

The exome, regions responsible for encoding proteins, consists of only 1-2% of a person's total genome but harbors about 85% of the causal variants identified in Mendelian disorders. This method allows for detection of variants in the coding regions of any gene and not just specific variants or specific genes.

Exome sequencing, which was initially regarded as mainly the "last resort" for patients who had previously tested negative for specific genes, karyotype, and/or microarray studies, can now be utilized as an affective first tier test, usually for patients with nonspecific phenotypes or phenotypes suggesting substantial genetic heterogeneity. Clinical exome sequencing can

identify contributing single nucleotide variants (SNVs), some classes of copy-number variants (CNVs), and Uniparental Disomy (UPD) changes in approximately 30% of the cases.

We offer end-to-end whole exome sequencing services, from sample to report generation. The report for exome sequencing includes primary molecular findings related to the patient's clinical phenotype, as well as opted in medically actionable secondary findings and carrier status for autosomal recessive disorders. In addition to the full exome reports, we offer a wide range of targeted panels.

#### **ACCREDITATION**















