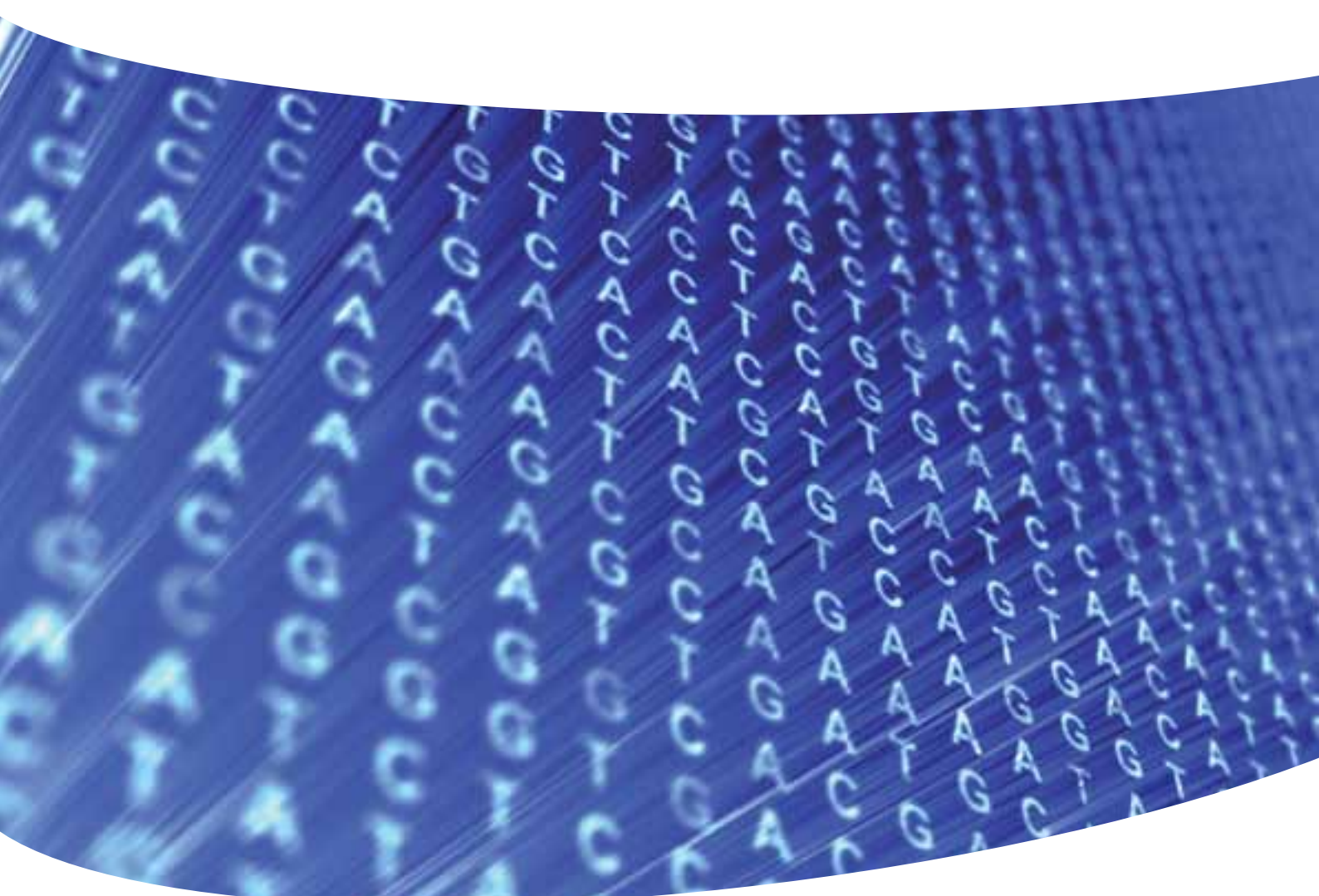


The Gandel Charitable Trust **Sequencing Centre**



Services

- DNA Sequencing
- Fragment Analysis
- Gene Expression
- Cell Line Identification

The Gandel Charitable Trust Sequencing Centre

The Gandel Charitable Trust Sequencing Centre is one of the four centres forming the MHTP Medical Genomics Facility:

- The Gandel Charitable Trust Sequencing Centre
- ACRF Centre for Cancer Genomic Medicine
- MHTP High Content Screening Centre
- MHTP Microarray Centre

Located at the Monash Health Translation Precinct (MHTP) in Victoria, we are a not-for-profit facility using state-of-the-art technologies to service research Institutes throughout Australia. We maintain an excellent reputation for the provision of the highest quality genomic data and comprehensive client support.

The Centre was established in 1999 and provides a NATA accredited DNA Sequencing service. Complementary services include Fragment Analysis, Gene Expression and Cell Line Identification using Applied Biosystems 3130xl Genetic Analyzers and 7900HT RT-PCR systems.

DNA Sequencing

The DNA Sequencing service utilises the latest technology, Applied Biosystems 16-capillary 3130xl Genetic Analyzers that generate sequence read lengths of approximately 1000 bases.

Services include:

- 1. Sequencing and electrophoresis:**
Template and primer are submitted together in a total volume of 16 μ l and we perform cycle sequencing (fluorescent labelling) and electrophoretic separation.
- 2. Purification and electrophoresis:**
Post-cycle sequencing reactions are submitted and we perform purification prior to electrophoretic separation.
- 3. Electrophoretic separation:**
Samples are submitted as dried, labelled extension products for electrophoretic separation.

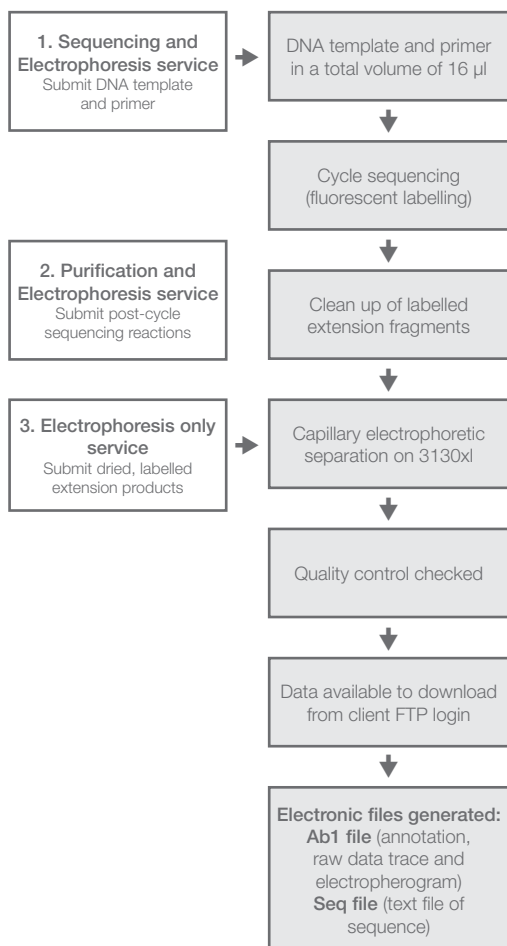
Member of:



WORLD RECOGNISED
ACCREDITATION

Contact Us

Email sequencingfacility@monash.edu
Web <http://mhtpmedicalgenomics.org.au>
Tel +61 3 9902 4790 or +61 3 9594 3576



Fragment Analysis

The Fragment Analysis service provides capillary separation of fluorescently labelled DNA fragments for analysis using LIZ or ROX size standards. Multiplexing can be accommodated using fluorescent dyes: 6-FAM, VIC, NED or PET.

Simply provide DNA fragments and size standard together in a total volume of 10 µl for capillary separation in 96-well format.

Cell Line Identification

Molecular profiling by short tandem repeats (STR) or microsatellite markers is a fast, affordable and highly discriminating method to authenticate a cell line. Using the AmpFISTR® Identifier® PCR Amplification Kit, the Centre uses STR profiling for identification of human cell lines. The Identifier Kit amplifies 15 loci and Amelogenin in a single tube and provides loci consistent with major world-wide STR databasing standards.

For STR analysis of your cell line, simply extract and purify DNA and provide 10 µl DNA at 50 – 100 µg/µl.

Many prestigious journals are adopting and recommending that guidelines be mandated for cell line authentication using STR analysis as a prerequisite to grant approval and/or publication.

Gene Expression

The Gene Expression service utilises Applied Biosystems 7900HT Fast RT-PCR systems. These are high throughput PCR instruments equipped with Fast 96- and 384-sample blocks and a block for Taqman® Array 384-well cards.

The service offers access to the 7900HT instruments arranged using an online booking system. All RT-PCR reagents and consumables can also be purchased directly from the Centre.

The platform supports numerous expression analysis assays, including:

- Gene Expression Analysis with Taqman® Assays
- Gene Expression Analysis with SYBR® Green-Based Assays
- Protein Expression with Taqman® Assays
- MicroRNA Profiling with Taqman® Assays

Other applications using the Applied Biosystems 7900HT Fast RT-PCR systems include:

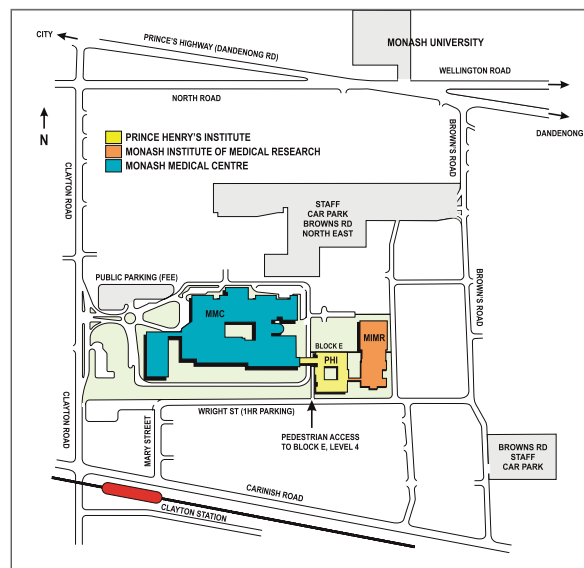
- Genotyping - detection of single nucleotide polymorphisms (SNPs)
- High Resolution Melt (HRM) - detection of genetic variation
- Copy Number Variation detection.



The Gandel Charitable Trust Sequencing Centre

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MHTP is a partnership between:

