

The Gandel Charitable Trust **Sequencing Centre**





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The Gandel Charitable Trust Sequencing Centre at the Monash Health Translation Precinct (MHTP) provides a NATA accredited DNA sequencing service. The Centre services research Institutes throughout Australia and maintains an excellent reputation for the provision of high quality, long read sequence data and comprehensive client support.

Operating as not for profit, services also include Fragment Analysis, Gene Expression, and RNA, DNA and protein analysis. The following platforms are utilised: Applied Biosystems 3130xl Genetic Analyzers, 7900HT Fast RT-PCR Systems and Biorad Experion.

Services include:

- DNA Sequencing
- Fragment Analysis
- Gene Expression
- RNA, DNA and Protein Analysis

DNA Sequencing

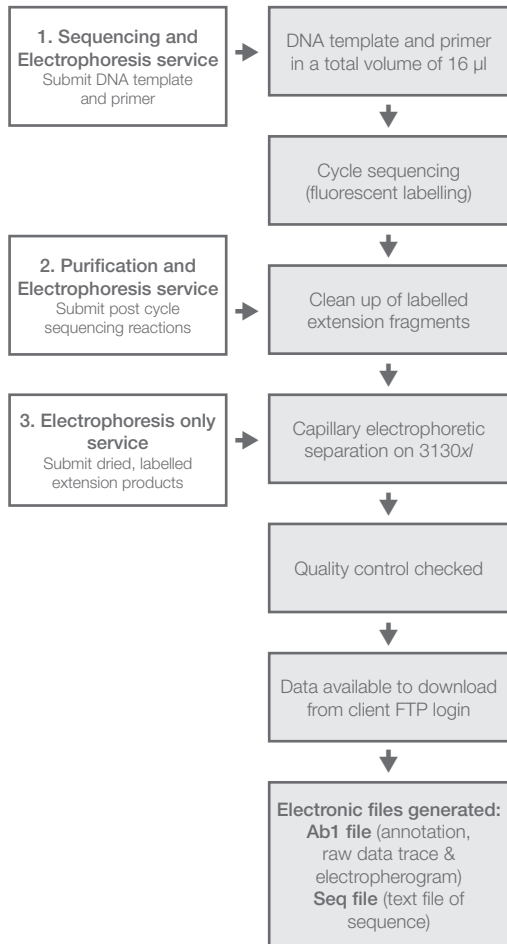
The DNA Sequencing service utilises the latest technology, Applied Biosystems 16-capillary 3130xl Genetic Analyzers that generates sequence read lengths of approximately 1000 bases.

Services include:

- 1. Sequencing and electrophoresis:**
Template and primer are submitted together in a total volume of 16ul 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.

Website: <http://sequencingfacility.med.monash.edu.au>

Email: sequencingfacility@monash.edu



Fragment Analysis

The Fragment Analysis service provides capillary separation of fluorescently labelled DNA fragments for analysis using ABI LIZ 500, 600 or 1200 size standards. Multiplexing can be accommodated using fluorescent dyes: 6-FAM, VIC, NED or PET.

Gene Expression

The Centre uses Applied Biosystems 7900HT Fast Real-Time PCR systems for Gene expression and SNP detection. The 7900HT is a high throughput PCR instrument equipped with a Fast 96-well and 384-well sample blocks and a Taqman® Low Density Array (TLDA) block.

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

RNA, DNA and Protein Analysis

The Experion automated electrophoresis system uses microfluidic technology to perform RNA, DNA and protein electrophoresis. The Experion system automatically performs the multiple steps of gel-based electrophoresis, replacing the need to run agarose or SDS-PAGE to separate and quantitate your RNA, DNA or protein samples.





The Gandel Charitable Trust **Sequencing Centre**

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The MHTP is a partnership between Southern Health, Prince Henry's Institute, Monash Institute of Medical Research and Monash University

Southern Health



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OF MEDICAL RESEARCH

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