

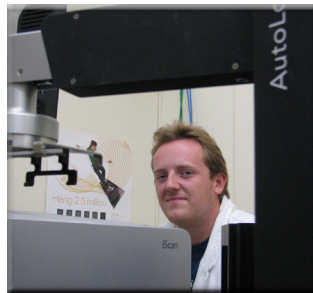
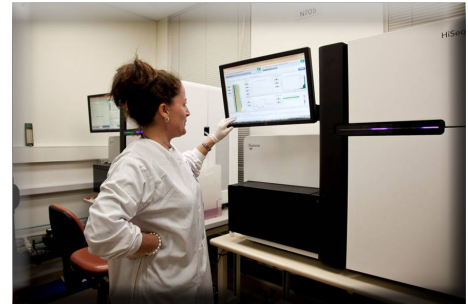
# The role of a national service provider



The following factors make it difficult or impossible for even large institutions to provide ongoing access to their researchers to state of the art genomics infrastructure. A national service provider can provide the solutions:

## Cost:

Equipment can be expensive, sometimes in excess of \$1 million. What is often not considered are the additional costs of commissioning, computing capacity, maintenance, technical support, and salaries of trained personnel required to run the instrumentation efficiently.

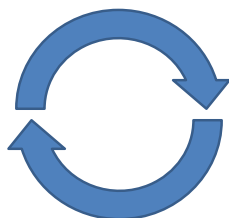


## Economies of Scale:

Equipment such as NGS is much more cost effective (time and reagent use) if operated at full or near full capacity. By aggregating projects from around the country, AGRF can realise these economies of scale and avoid duplication.

## Complexity:

Commissioning new equipment can be complex, expensive and time consuming. Newly released equipment is notoriously fickle; managing breakdowns, trouble shooting failed runs, negotiating with suppliers and ongoing maintenance are difficult for research laboratories to manage.



## Rapid Obsolescence:

The technology cycle is currently very rapid. Outlaying substantial sums of money for instrumentation only to see it superseded within a matter of months is a constant issue.

## Risk:

Owning equipment presents a number of risks which can be avoided by outsourcing services. Apart from the financial risk of purchasing expensive and short-lived equipment, there is a real chance of delay caused by breakdown, shortage of reagents and absence of technical support. A service provider takes these risks on board and minimises their impact.



# The role of a national service provider

## Trained Personnel:

Purchase of instrumentation may also require employment of trained personnel in order to run the instrumentation efficiently. AGRF has a large team of scientists and technical personnel who are highly experienced in the operation of genomics instrumentation and are available to advise researchers on the best strategies for their use. Staff training programs are assessed by the National Association of Testing Authorities (NATA) as part of the AGRF's quality assurance process.



## Quality Systems:

As a service provider the AGRF quality management system has been developed to ensure our clients have access to state-of-the-art genomic services that are efficient, effective and accurate. AGRF's services are accredited by NATA to the International Standard ISO17025:2005, with data quality also assured through constant benchmarking of large numbers of sample and runs.



## Computing capacity and Bioinformatics:

Modern genomics instrumentation produces vast amounts of data which requires high-end computing capacity for storage and processing. As well as having a dedicated team of bioinformaticians, LIMS developers, and IT professionals, AGRF links to other high performance computing and bioinformatics initiatives on a national basis.

The **service provider** therefore allows researchers to access a regularly upgraded suite of state-of-the art genomics infrastructure, without incurring the costs and risks of owning their own equipment. The cost to the researcher of accessing services is kept low through high throughput economies of scale and NCRIS operational subsidies.