



Australian Bioinformatics Facility

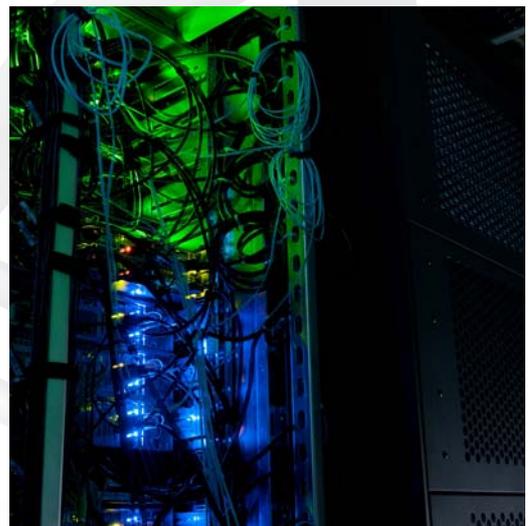
The Australian Bioinformatics Facility (ABF) offers world class expertise in bioinformatics and high performance computing as a specialised service platform within the Bioplatforms Australia technology network.

Australian Bioinformatics Facility

The ABF directly supports the capability and services of Genomics Australia, Proteomics Australia and Metabolomics Australia by integrating bioinformatics solutions and support to all research services.

The ABF aims to boost the bioinformatics capacity of each of the three 'omics platforms through direct participation in specific initiatives and by providing universal support for all platform-based activities. Such support includes disseminating best practice techniques to all Bioplatform Australia technology networks and developing and testing new tools and methods to enhance their service capability and performance.

The ABF operates from within the Western Australian State Government Centre of Excellence in Comparative Genomics (CCG) at Murdoch University. Its specialised bioinformatics service draws upon an extensive range of expertise and infrastructure located within the Centre, including the Bioinformatics Research Laboratory, a high performance computing facility that represents unique scientific infrastructure in Australia.





Of particular note is an enormous display wall which offers 18 million pixels of visualisation enabling scientists to visually interpret and conduct in-depth analysis of data in a manner not previously possible.

ABF's team offers world class expertise in the areas of:

- bioinformatics;
- computational biology;
- comparative genomics;
- data integration and management;
- molecular biology;
- internet-based software development; and
- high performance computing.

Specific bioinformatics capabilities available as a direct service or incorporated in research services delivered by the 'omics consortiums of Bioplatforms Australia include:

- sequence assembly;
- gene and genome annotation;
- mapping;
- transcriptomics;
- comparative genomics;
- vaccine candidate identification;
- new tools for data alignment;
- phylogenetic analysis;
- gene expression and statistical analysis;
- peptide mass fingerprinting analysis;
- customisation of protein datasets; and
- proteomic and metabolomic data analysis.

Summary

The **Australian Bioinformatics Facility** is part of Bioplatforms Australia, a broad network of high tech organisations which aim to maximise access to Australia's bioplatforms infrastructure and expertise for the benefit of the entire Australian research community. **Bioplatforms Australia** was established as a non-profit entity to manage investment funding allocated through the Australian Commonwealth Government's *National Collaborative Research Infrastructure Strategy* (NCRIS). Commonwealth funds together with co-investments from State Governments, Academic and Research Institutes and commercial entities are directed to enhancing Australia's life science capabilities in the areas of Genomics, Proteomics, Metabolomics and Bioinformatics.

For more information please contact Andrew Gilbert of Bioplatforms Australia at agilbert@bioplatforms.com or call 0410 538648.



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