

Affymetrix GeneChip Technology

The GeneChip technology platform consists of high-density oligonucleotide microarrays and tools to help process and analyse those arrays, including standardized assays and reagents, instrumentation, and data management and analysis tools:

<http://www.affymetrix.com/products/system.affx>

Affymetrix offers a wide choice of high-density GeneChip arrays off-the-catalogue, including human DNA mapping arrays and expression analysis arrays for about 30 different organisms (<http://www.affymetrix.com/products/arrays/index.affx>), as well as custom arrays. The Affymetrix oligonucleotide microarray platform possesses the capability to facilitate:

linkage analysis
association studies
population genetics
chromosomal copy number
fine mapping
examining custom SNPs
comparative sequencing
SNP identification
sequence analysis of small genomes
genome-wide analysis of gene expression
study of alternative splicing
DNA methylation
origins of replication
mapping of transcription factor binding sites.

The Affymetrix facility, based in our laboratory, has been under new management for over a year. In this time we have:

- (i) Upgraded the scanner to allow use of the very latest generation of high density arrays.
- (ii) Become part of the University's core 'Genomics' facility
- (iii) Become members of the European 'Affymetrix New Core Lab Program', which ensures that:
 - a) We can successfully provide microarray analysis service to the University, and beyond.

- b) We, and hence users, have full support from Affymetrix technical and sales representatives.
- c) All instruments are covered by a valid Instrument service contract.

NB. This is now a not-for-profit facility overseen by a committee of regular users, ensuring that the users' interests are always of major consideration.

Sample preparation is standardised according to the Affymetrix protocols and requires basic molecular biology expertise. We can provide guidance, but users are encouraged to perform these steps in their own laboratory. We can train users to perform the array processing steps (hybridisation, washing, staining and scanning) in our laboratory. These steps are automated and require minimal hands-on time. In some cases we may be willing to embark on a scientific collaboration and provide input on data analysis, if there is a common interest.



For more information and enquiries, please contact:

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