

Scientific facilities available at the Babraham Institute



Genomics

The Babraham Institute provides unique research facilities of national importance. These have been developed with significant investment from the BBSRC. Next Generation Sequencing technology has revolutionised post-genomics studies of gene expression, genetic regulation and nuclear dynamics. Its flexibility allows almost any genetic material to be studied on a genome-wide scale. The Facility provides library quality control and sequencing services for the Babraham Institute and external companies, offering a variety of sequencing solutions for different project sizes and a broad range of applications.

The Technology

The Facility has state-of-the-art Illumina sequencers, utilising the most widely-adopted NGS technology to produce highly accurate sequencing results in a time- and cost-effective manner.

HiSeq 2500: The HiSeq 2500 instrument maximises throughput and data yield. As many as 16 samples or sample pools may be run at the same time.

NextSeq: The NextSeq enables researchers to obtain results faster, from a limited number of samples, without reducing the depth of sequencing.

MiSeq: The MiSeq personal sequencer provides maximum flexibility with a wide range of read lengths and short turnover times.

Pricing

Prices for use of the Facility's services are available on request.



Services

Researchers can select the sequencing platform and run type that provides the sequencing depth, read length and turnaround time that best suits their project. All run types are available in both paired-end and single-read analysis formats.

High Output Runs

- maximum data output ; ideal for larger projects requiring high sample throughput
- read lengths up to 125 bp

NextSeq Runs

- ideal for projects with small sample numbers requiring a high read yield
- flexible read lengths up to 150 bp

MiSeq Runs

- suitable for validation studies, small genome and amplicon sequencing
- fast turnaround times
- read lengths up to 300 bp

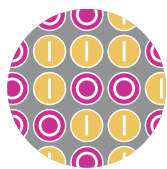
Quality Control

The Next Generation Sequencing Facility also offers a library quality control service, based on the Agilent 2100 Bioanalyzer system.

Coming soon!

Sample preparation services for DNA-seq and RNA-seq libraries to be offered in early 2017. Please contact the Facility for details.

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Bioinformatics

The Bioinformatics group have a wide range of experience covering virtually all aspects of modern bioinformatics and statistics in both academic and commercial settings.



Biological Chemistry

The Biological Chemistry Facility provides a research capability to solve biological problems through the use of chemical knowledge and synthetic chemistry skills.



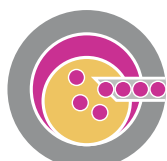
Biological Support Unit

The Biological Support Unit (BSU) provides housing and care for rodents at a highly defined health status, offering the highest standards of welfare, excellence in husbandry and procedural technique to support both academic scientific research programmes and private companies.



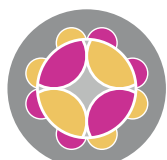
Flow Cytometry

The Flow Cytometry Facility offers high quality service and state-of-the-art instrumentation to members of the Babraham Institute and external companies, including those based on the Babraham Research Campus.



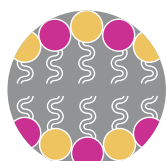
Gene Targeting

The Babraham Gene Targeting Facility provides a complete service to generate novel genetically altered mouse strains for biopharmaceutical companies and academic institutes.



Imaging

The Imaging Facility provides supported access to state-of-the-art fluorescence imaging technologies and offers expertise in live and fixed cell imaging.



Lipidomics

The Babraham Lipidomics Facility has established a series of LC-MS/MS, GC-MS/MS and HR/AM direct infusion mass spectrometric methods to analyse 37 classes of neutral lipids, phospholipids and sphingolipids from various biomedical samples.



Mass Spectrometry

The Mass Spectrometry Facility is equipped with a range of high resolution systems, which can be used for the identification, characterisation and quantitation of almost any type of biomolecule.



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