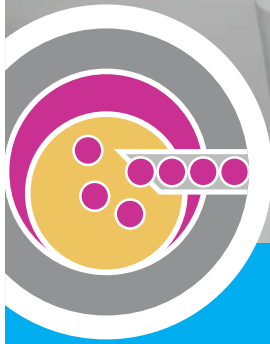


Scientific facilities available at the Babraham Institute



Gene Targeting

The Babraham Institute provides unique research facilities of national importance. These have been developed with significant investment from the BBSRC. The Babraham Gene Targeting Facility provides a complete service to generate novel genetically altered mouse strains for biopharmaceutical companies and academic institutes. Our mission is to provide the investigators with custom-made animal models using cutting-edge technology and expertise.

Areas of expertise

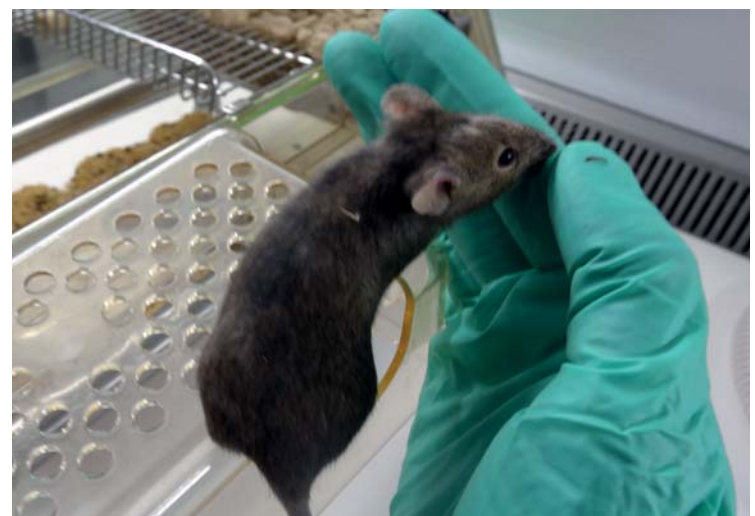
The Facility has many years of expertise and know-how in generating genetically altered animal models. We are able to offer services and assistance on the design and generation of gene targeting constructs, *in silico* design and cloning, embryonic stem (ES) cell targeting, molecular analysis of ES cell clones, creation of germline chimeras, and DNA pronuclear injection for transgenic mouse generation. The Facility provides excellent scientific advice at all stages during the process and can deliver validated genetically altered mouse models in times comparable with industry-leading turnaround times.

Services on offer

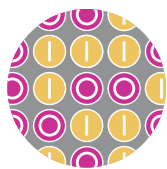
- Expression vector generation
- Targeting vector generation
- Pronuclear Microinjection into 129Ola or C57Bl/6 strain
- Electroporation and ES cells culture
- 129Ola or C57Bl/6 ES cells targeting and screening
- Injection of ES cells into blastocysts
- Animal husbandry and confirmation of germline transmission
- Microinjection of RNA, protein or DNA into oocytes and early embryos

We offer the generation of the following types of mouse model:

- Knockout mouse models
- Knockin mouse models
- Humanised mouse models
- ROSA26 targeting
- Transgenic mouse models
- KOMP/EUCOMM



Scientific facilities available at the Babraham Institute



Bioinformatics

The Bioinformatics group has 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.



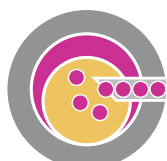
Biological Support Unit

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.



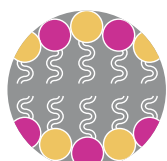
Gene Targeting

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.



Sequencing

The Next Generation Sequencing 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.

