

NUCLEUS - Genomics Core Facility University of Leicester, UK



Visit our website: www.le.ac.uk/nucleus

The Genomics Core, run by the 'NUCLEUS' team (**N**etworking, **U**nification, **C**ollaboration, **E**xpertise, **U**ser **S**upport), is a state of the art facility based within the Department of Genetics enabling researchers within, and outside the University, to incorporate the very latest Genomics technologies in their experiments.

We provide support, for the following applications:

- DNA/RNA Sequencing
- Gene Expression Analysis (both mRNA and microRNA)
- SNP Genotyping
- Copy Number Variation Analysis
- Methylation Analysis
- Cytogenetic Analysis
- DNA/RNA/Protein Quantification and Quality Control

Platforms currently available within the facility:

- > Illumina Bead Station: HTP genotyping, gene expression, methylation analysis
- Roche/454 GSFLX: Next-generation sequencing system
- ➤ Febit GENIOM-1: MicroRNA profiling service
- > DASH: Robust, low/medium throughput SNP genotyping that reveal CNVs
- > Roche LightCycler 480: Advanced qPCR machines, 96-well and 384-well capacity
- ABI 7900 (taqman): qPCR machine, 384-well capability, Taqman Low Density Array (TLDA)
- Pre-PCR Clean room: Fully furnished, dedicated room for PCR set up
- > Bioruptor Sonicator: Precision sonication system
- > Hydroshear: Uses hydrodynamic shearing forces to fragment DNA strands
- Genepix Micro-array Scanner: 3 colour system with sample autoloader
- ▶ Biomek FX Robot: General purpose liquid handling device, with many add-ons
- Agilent Bioanalyser: For accurate quantification of DNA, RNA and protein
- Nanodrop 8000: For measuring absorbance of DNA, RNA, dyes, proteins & microbial cell culture OD 8 samples measured at once

If you would like any further information on how we can help, please contact us:

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