

Environmental Sequencing Facility

Head: Dr Phyllis Lam

The Environmental Sequencing Facility provides a range of next-generation sequencing and analysis services using the latest cutting-edge technologies. Our experienced staff offer a wealth of knowledge in this field and understand the complex requirements of modern research environments.

Based within Ocean and Earth Science at the National Oceanography Centre Southampton, the Environmental Sequencing Facility is part of a world-class research institution.

Our services

We are able to provide services covering the whole next-generation sequencing workflow, including:

- Advice on experimental design
- Library preparation & quality control
- Sequencing
- Data analysis and interpretation
- Quotes for grant applications

Our facilities

The majority of our digital sequencing activity is delivered by the Illumina MiSeq sequencer.

- Automated liquid handling capabilities, using the Biomek 4000 liquid handling robot and the Formulatrix Mantis automated liquid dispenser
- Roche LightCycler qPCR instruments
- Covaris M220 for reproducible DNA fragmentation

- Sample tracking using FluidX barcoded tubes
- Bioinformatics capabilities: we run a dedicated analysis server and filestore
- Biomek 4000 for assay development other than NGS

Analyses

We have the capacity to conduct a range of analyses, including:

- Whole genome sequencing of small genomes
- RNA sequencing
- Amplicon sequencing
- ChIP-seq
- Methylation profiling
- Exome sequencing
- Custom target capture
- RADseq



Illumina MiSeq sequencer

We are happy to work with you to develop bespoke analytical methods for your requirements

Example of analysis



For more information and quotes please get in touch

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