

ADVANCED GENOMIC SERVICES

About Us

We are a state of the art Genomics core facility offering researchers access to advanced genomic workflows. The team is staffed by highly skilled technicians with extensive experience across genomic workflows and data analysis.

Facilities

Located in the Patrick G. Johnson Centre for Cancer Research, we house state of the art sample preparation, sequencing and liquid handling equipment. We are able to facility both large and small scale experiments.

Services

Access available to a range of both off the shelf services and custom workflows. All services are not for profit. We support projects at all scales from project design, through to sample preparation, sequencing and data analysis, including support for grant preparation.

Bulk Sequencing

RNAseq Shotgun Metagenomics Methylation WGS/WES Custom

Long Read

Full-length 16S Iso-Seq Long read scRNAseq PacBio Kinnex ONT workflows

Single Cell

10X GEX 10X ATAC 10X Multiome 10X Flex - FFPE Parse

Spatial

10X Xenium 10X Visium 10X VisiumHD TMA Creation High-capacity slide scanning



ADVANCED GENOMIC SERVICES

Service	Unit Breakdown
Sample QC	
Fragment Analyser	Per row (11 samples)
TapeStation D1000	Per sample
TapeStation D5000	Per sample
TapeStation RNA	Per sample
Qubit	Per sample
Quant-IT	Per sample
Nanodrop	Per sample
DNAse I treatment	Per sample
Myra library normalisation and pooling	Per sample

Equipment Use Only	
Echo	Per 15 min slot
Lightcycler 480	Per run

Extraction	
Manual extraction	Per sample
Manual FFPE extraction	Per sample





ADVANCED GENOMIC SERVICES

Library preparation - Single Cell	
Chromium GEM-X Single Cell 3' Kit	Per sample
Chromium Next GEM Single Cell ATAC Kit v2	Per sample
Chromium Next GEM Single Cell Multiome ATAC + Gene Expression	Per sample
Chromium GEM-X Single Cell 5' Kit	Per sample
Parse Evercode Mini Kit V3 (1-12 samples/10,000 cells)	Per kit
Parse Evercode WT Kit V3 (1-48 samples/100,000 cells)	Per kit
Parse Evercode Mega Kit V3 (1-96 samples/1M cells)	Per kit
LeviCell EOS Cartridge	Per 4 samples
LeviCell EOS Levitation Agent	Per sample

Spatial Transcriptomics	
Visium CytAssist for FFPE Spatial Gene Expression 6.5mm	Per slide (2 areas)
Visium HD, Human/Mouse Transcriptome (FFPE)	Per slide (2 areas)
Xenium In Situ Gene Expression (run only - panel added separately)	Per run (2 slides)
Xenium panel - various, refer to 10X Genomics website	Per run (2 slides)





ADVANCED GENOMIC SERVICES

SERVICE LIST 2024-2025

Library preparation - Bulk sequencing	
KAPA RNA HyPerPrep Kit with RiboErase (Human, Mouse, Rat)	Per sample
KAPA mRNA HyPerPrep Kit with Poly A enrichment	Per sample
DNA Illumina Prep	Per sample
Illumina RNA Prep with Exome Enrichment	Per sample
QIAseq miRNA Prep	Per sample
PacBio Full Length 16S	Per sample
PacBio Shotgun Metagenomics	Per sample
PacBio WGS	Per sample
PacBio Iso-Seq RNA	Per sample
PacBio MAS-Seq	Per sample
Twist Human Methylome	Per sample
Quant-seq 3' FWD	Per sample
Custom library kit - facility costs	Per sample
Custom library kit - reagent cost	Total



genomics@qub.ac.uk

online form



ADVANCED GENOMIC SERVICES

Illumina Sequencing – MiSeq Run	
MiSeq Reagent Nano Kit v2 (300-cycles, 1M RPF)	Per run
MiSeq Reagent Micro Kit v2 (300-cycles, 4M RPF)	Per run
MiSeq Reagent Kit v2 (300-cycles, 12-15M RPF)	Per run
MiSeq Reagent Kit v2 (500-cycles, 12-15M RPF)	Per run
MiSeq Reagent Kit v3 (150-cycle, 22-25M RPF)	Per run
MiSeq Reagent Kit v3 (600-cycle, 22-25M RPF)	Per run

Illumina Sequencing – NextSeq 2000 Run	
NextSeq™ 1000/2000 P1 XLEAP-SBS™ Reagent Kit (100 Cycles)	Per run
NextSeq™ 1000/2000 P1 XLEAP-SBS™ Reagent Kit (300 Cycles)	Per run
NextSeq™ 1000/2000 P1 XLEAP-SBS™ Reagent Kit (600 Cycles)	Per run
NextSeq [™] 1000/2000 P2 XLEAP-SBS [™] Reagent Kit (100 Cycles)	Per run
NextSeq™ 1000/2000 P2 XLEAP-SBS™ Reagent Kit (200 Cycles)	Per run
NextSeq [™] 1000/2000 P2 XLEAP-SBS [™] Reagent Kit (300 Cycles)	Per run
NextSeq™ 1000/2000 P2 XLEAP-SBS™ Reagent Kit (600 Cycles)	Per run
NextSeq™ 1000/2000 P3 XLEAP-SBS™ Reagent Kit (100 Cycles, 1.2B RPF)	Per run
NextSeq [™] 1000/2000 P3 XLEAP-SBS [™] Reagent Kit (200 Cycles, 1.2B RPF)	Per run
NextSeq [™] 1000/2000 P3 XLEAP-SBS [™] Reagent Kit (300 Cycles, 1.2B RPF)	Per run
NextSeq [™] 1000/2000 P4 XLEAP-SBS [™] Reagent Kit (100 Cycles, 1.8B RPF)	Per run
NextSeq [™] 1000/2000 P4 XLEAP-SBS [™] Reagent Kit (200 Cycles, 1.8B RPF)	Per run
NextSeq™ 1000/2000 P4 XLEAP-SBS™ Reagent Kit (300 Cycles, 1.8B RPF)	Per run





ADVANCED GENOMIC SERVICES

Illumina Sequencing – NovaSeq 6000 Run	
NovaSeq 6000 SP Reagent Kit v1.5 (100 cycles, 650-800M RPF)	Per run
NovaSeq 6000 SP Reagent Kit v1.5 (200 cycles, 650-800M RPF)	Per run
NovaSeq 6000 SP Reagent Kit v1.5 (300 cycles, 650-800M RPF)	Per run
NovaSeq 6000 SP Reagent Kit v1.5 (500 cycles, 650-800M RPF)	Per run
NovaSeq 6000 S2 Reagent Kit v1.5 (100 cycles, 3.3-4.1B RPF)	Per run
NovaSeq 6000 S2 Reagent Kit v1.5 (200 cycles, 3-4.1B RPF)	Per run
NovaSeq 6000 S2 Reagent Kit v1.5 (300 cycles, 3-4.1B RPF)	Per run
NovaSeq 6000 S4 Reagent Kit v1.5 (200 cycles, 8-10B RPF)	Per run
NovaSeq 6000 S4 Reagent Kit v1.5 (300 cycles, 10B RPF)	Per run
2- lane XP run additional cost (S2 only)	Per run
4-lane XP run additional cost (S4 only)	Per run

Long Read Sequencing	
8M SMRT Cell	Per run
P2 Solo	Per run
GridION	Per run





ADVANCED GENOMIC SERVICES

SERVICE LIST 2024-2025

Data Analysis	
Data Management	Per run
Primary Alignment & Counts (existing reference)	Per run
Primary Alignment & Counts (new reference)	Per run
RNA Exome Analysis Pipeline	Per Run
Differential Gene Expression Analysis (DGEA) and Pathway Analysis (Human only)	Per Project
Nextflow pipeline (existing)	Per Project
Nextflow pipeline (new)	Per Project
Custom pipeline/analysis base fee (plus per hour to be added)	Per Project



genomics@qub.ac.uk