

Genomics Core Technology Unit
Queen's University Belfast
Lisburn Road
97 Lisburn Road
Belfast BT9 7BL
Tel +4428 9097 2796
genomics@qub.ac.uk

QUB Genomics CTU

Project Request Form

The following pro forma is designed to capture all of the necessary information in order to perform our services.

This information will be used to:

1. Choose the most appropriate workflow
2. Identify samples required for analysis
3. Ensure sample tracking
4. Provide a single document that encapsulates sufficient information to enable smooth running of the entire process

The successful running and outcome of each project is directly related to the advance planning steps. As such, capturing the requisite information prior to the instigation of the project is of paramount importance.

Client Details	
Name	
PI	
Institution	
Department	
Address	
Telephone	
Email	

Background

Please OUTLINE the biological question to be addressed, OR specify the metrics you want

Sample Processing Details:

Number of Samples Requested	
Has ethical approval and/or consent form been given for the sequencing?	
Ethical Approval Number	
Is an MTA in place ?	
Are samples in your possession and ready to submit?	
Number of experimental groups	
Number of experimental replicates	
Additional details to think we need to know	

Sample Type:

Total RNA	
Genomic DNA	
Blood	
Tissue (please indicate fresh or frozen)	
Formalin Fixed Paraffin Embedded tissue (FFPE)	
Single cell suspensions	
Other / Additional details	

Species of Interest:

Human	
Rat	
Mouse	
Other (please detail)	
Additional details (please include genome link if possible)	

Sample Extraction:

Extraction Method used by Client	
Type of solution sample dissolved in	
Does buffer contain EDTA	
Samples DNase treated (RNA only)	
Gel Image/ Bioanalyzer traces available	
Additional details	

Project Type:

Extraction (MagnaPure)	
Sample QC Only	
mRNA-Seq (Poly-A enrichment)	
RNA-Seq with ribosomal depletion	
RNA-Seq Targeted/ custom	
miRNA-Seq	
DNA-Seq Whole Exome	
DNA-Seq Whole Genome (shotgun)	
DNA-Seq Custom / Targeted	
Chip-Seq library prep ONLY on offer	
Methylation Sequencing	
16S metagenome	
Targeted metagenome	
Instrument Run only (MiSeq / NextSeq/ Nova seq)	
Fluidigm C1 (single cell library prep)	
Genomics 10x (single cell library prep)	
Sanger Sequencing Electrophoresis only	
Sanger Sequencing Cleanup & Electrophoresis	
Sanger Full Sequencing	
Informatics Only	
Other (please specify):	

Kit Preference (if Known)

Small RNA Library Prep (Qia seq)	
TruSeq Stranded mRNA Library Prep	
KAPA Stranded RNA HyperPrep with Riboerase HMR	
KAPA Stranded RNA HyperPrep without Riboerase	
Targeted Choice RNA Library Prep	
Exome/ Medexome Library Prep	
Nextera Flex DNA Library Prep	
KAPA DNA HyperPlus Library Prep	
EpiGiant Methyl Capture Library Prep	
SeqCap Epi CpGiant Enrichment Kit	
SeqCap Epi Choice Enrichment Kit	
10X GENOMICS	
Other (Please Specify)	

NGS Run Specification Required:

Run Parameters	
Read Length (bp)	
Single Read Sequencing (SR)	
Paired End Sequencing (PE)	
Number of reads per sample (M)	
Depth of Coverage	

Additional Information

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NB

Primary QC analysis will be provided with all sequencing runs performed within the GCTU. We will provide raw sequencing quality metrics and first pass alignment/coverage metrics as standard for Human and Mouse alignments. Other species alignments need to be discussed and may cost extra. Data will be returned as De-multiplexed FASTQ files as standard.

Project Schedule:

Expected Date of sample delivery	
Action for samples at project close out (samples will be destroyed unless otherwise specified)	

Additional Information

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Sample Requirements:

Please refer to table below for guidance on type, quantity and concentration of sample to submit for your particular project.

Library Prep Method	Type of Nucleic Acid	Sample requirement	Sample Conc.	Library Prep/Sequencing Input [ng]	Input range validated by manufacturer	Format for 1-24 samples	Format for 25-96 samples
KAPA Stranded RNA HyperPrep with Riboerase HMR - AUTOMATED	Total RNA	15 µL at 100 ng/µL	100 ng/µL	1000 ng	25 - 1000 ng	Single tubes or 96-well plate	96-well plate
KAPA Stranded RNA HyperPrep with Riboerase HMR - MANUAL	Total RNA	15 µL at 25 ng/µL	25 ng/µL	250 ng	25 - 1000 ng	Single tubes or 96-well plate	96-well plate
KAPA Stranded RNA HyperPrep without Riboerase - AUTOMATED	mRNA, ribosomal-depleted RNA	15 µL at 10 ng/µL	10 ng/µL	100 ng	1 - 100 ng	Single tubes or 96-well plate	96-well plate
KAPA Stranded RNA HyperPrep without Riboerase - MANUAL	mRNA, ribosomal-depleted RNA	15 µL at 2.5 ng/µL	2.5 ng/µL	25 ng	1 - 100 ng	Single tubes or 96-well plate	96-well plate
TruSeq Stranded mRNA	Total RNA	15 µL at 50 ng/µL	50 ng/µL	500 ng	100 - 1000 ng	Single tubes or 96-well plate	96-well plate
Kapa HyperPlus for target capture enrichment or WGS	genomic DNA	15 µL at 20 ng/µL	20 ng/µL	200 ng	1 - 1000 ng	Single tubes or 96-well plate	96-well plate
Nextera DNA Flex	genomic DNA, PCR amplicon	15 µL at 20 ng/µL	20 ng/µL	200 - 500 ng	1 - 500 ng	Single tubes or 96-well plate	96-well plate
QiaSeq miRNA	Total RNA			100 – 500ng			
Nimblegen SeqCap RNA	Total RNA			100ng -			
Sequencing on MiSeq	NGS Library	5 µL at 4 nM	4nM	4 fmol	2 - 4 nM	Single tube	
Sequencing on NextSeq 500	NGS Library	5 µL at 4 nM	4nM	4 fmol	0.5 - 4 nM	Single tube	
Sequencing on NovaSeq 6000	NGS Library	100 - 310 µL at 2 nM	2 nM	200 fmol - 620 fmol	0.875 - 2.5 nM	Single tube	
Single cell suspensions	n/a	700-1000 cells/ul					

	QUB GCTU Approval	Client Approval
Name	Julia Miskelly	
Title	GCTU Manager	
Signature		
Date		
PO / Project Code for charging For Project Codes please include start and end dates. *Projects will not be tracked until an active project code or P.O is provided		
Funding Body (UK or EU)		
Allocated Project Number		
Quoted Cost		

1. Definitions

- 1.1 The University means the Queens University of Belfast
- 1.2 The Client means 'the party entering into a contract with the University'.
- 1.3 The proposal means 'the offer of work to be carried out in accordance with the Client's enquiry.'

2. Scope

The nature of the agreed work is detailed in MF02-Project Request Form .

3. Price

In consideration of the University undertaking the work set out in MF02 the Client agrees to pay the fees, costs and all other expenses as set out AGREED QUOTE. VAT is not included and will be charged where appropriate to the Client at the standard rate. Unless stated otherwise in the Proposal, travel and subsistence costs incurred on project business will be charged extra.

4. Time for Payment

Payment in respect of work carried out in accordance with Clause 2 above shall be made within 30 days of the date appearing on the invoice. Cheques should be crossed and made payable to the Queens University Belfast.

5. Confidentiality

All information communicated by the Client in connection with either the Proposal or work carried out or to be carried out pursuant to the Proposal shall be treated by the University as confidential and such information shall not be made known to any person other than a person who is necessarily either associated with the Proposal or with work carried out or to be carried out pursuant to the Proposal as the case may be.

6. Publication

Neither the University nor the client shall use the name of the other in any publicity material nor publish anything relating to work being undertaken pursuant to the Proposal without the prior written permission of the other (such permission not to be unreasonably withheld).

7. Disclaimer of Liability

- 7.1 The University will exercise reasonable care to ensure the accuracy of the advice, information and drawings provided in connection with the Proposal but the University will not accept any liability whatsoever in respect of any claim or claims arising from the use by the Client or by any third party of any such advice, information or drawings.
- 7.2 The University makes no representation or warranty that advice given by its servants or agents or the use of any information provided in connection with the Proposal will not result in infringement of third party rights and the University does not accept any responsibility whatsoever for infringement of such rights.

8. Risk

- 8.1 Unless otherwise specified in the Proposal the price of goods and/or work is Ex Works and the goods shall be at the sole risk of the Client from the time they leave the University's premises which shall be the time of delivery.
- 8.2 Where the University delivers goods to the Client's premises or elsewhere as directed by the Client, the goods shall be at the sole risk of the Client as from the time of delivery as aforesaid in this sub-Clause.

9. Delivery

- 9.1 The University will use its best endeavours to comply with any date or dates for dispatch or delivery of the goods or completion of the works as stated in the Proposal and such date or dates shall constitute only statements of expectation and shall not be binding. Failure to dispatch or deliver the goods or complete work by such date or dates shall not constitute a breach of contract and the Client shall not be entitled to treat the contract as thereby repudiated or to rescind it or claim compensation for such failure for any consequential loss or damage there-from.
- 9.2 Should expedited delivery of goods or services be agreed and necessitate overtime or other additional cost, an extra charge may be made over and above that shown in the Proposal.
- 9.3 Should work in pursuance of the Proposal be suspended at the request of or delayed through any default of the Client for a period of 30 days or more the University shall then and in that event be entitled to payment for work already carried out, materials specifically purchased and settlement costs for staff recruited specifically in connection with the Proposal.
- 9.4 If the University is prevented or hindered from supplying the goods or any part thereof or completing the work in accordance with the Proposal by any circumstances beyond its control, including (without limiting the foregoing) the securing of labour, materials or supplies, Act of God, War, Strike, Lockout or other labour dispute, Fire, Flood, Drought, Legislation or other cause the contract shall be subject to cancellation or variation but the University shall not have any liability to the Client for any direct or consequential loss or damage suffered by the Client as a result.

10. Ownership

The goods and services in this contract shall remain the property of the University until the purchase price for them shall have been paid or satisfied in full.

11. Client's Property

Except where loss or damage arises from the negligence of the University its servants or agents property supplied to the University or on behalf of the Client will be held and worked upon by the University at the Client's risk.

12. Indemnity

The Client shall indemnify and keep indemnified the University its servants or agents against all claims, actions, losses, damages, costs and expenses which may be brought against or incurred or suffered by the University its servants or agents in connection with the carrying out of work pursuant to the Proposal which arise as a result or due to the negligence of the client its servants or agents. This condition shall survive the termination of any contract made pursuant to

acceptance of the Proposal.

13. Background Intellectual Property

This Agreement does not affect the ownership of any background Intellectual Property or in any other technology, design, invention, software, data, technique, or materials that are not pursuant to the Proposal, and such background Intellectual Property will remain the property of the party that contributes them. No licence to use any background Intellectual Property is granted or implied by this Agreement.

14. Resulting Intellectual Property

Copyright in all original drawings designs proposals reports and other written matter whether made pursuant to the Proposal or otherwise remains vested in the University but the University shall grant to the Client free of charge for the applications or field of use specified in or covered by the Proposal, use of such drawings designs proposals reports or other written matter. It is not envisaged that the proposal will generate any other resulting Intellectual Property, but if such resulting Intellectual Property is created, then the University and the Client will meet to discuss the ownership, protection, maintenance and exploitation of such resulting Intellectual Property.

15. Law

These Conditions together with the Proposal shall be governed by and construed in accordance with the Laws of Northern Ireland.

16. Entire Agreement

Upon acceptance of the Proposal this Agreement together with the Proposal shall constitute the entire agreement between the University and the Client.

17. Communications

17.1 All communications to the University shall be addressed to the Research and Enterprise Directorate, Queen's University Belfast, 63 University Road, Belfast BT7 1HF.

17.2 All communications to the Client shall be sent to the address appearing in the Proposal unless some other address has been notified in writing to the University.

Signature

Mr Tom Edgar For Queen's University, Belfast _____

Date

For The Client _____

Name Printed _____

Date _____