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## IMR Sequencing Services – Current Pricing (January 2017)

16S/18S/ITS Amplicons (per sample) – Academic			
	<50 samples	<b>50-200 samples</b>	>200 samples <sup>1</sup>
Library Preparation + Sequencing (~50,000 seq./sample)	\$30	\$25	\$20
DNA Extraction <sup>2</sup>	\$15	\$15	\$15
Standard Bioinformatics Analysis Pipeline <sup>3</sup>	\$500 / project	\$750 / project	\$1000 / project

16S/18S/ITS Amplicons (per sample) – Commercial			
	<50 samples	<b>50-200 samples</b>	>200 samples <sup>1</sup>
Library Preparation + Sequencing (~50,000 seq./sample)	\$40	\$35	\$30
DNA Extraction <sup>2</sup>	\$16	\$16	\$16
Standard Bioinformatics Analysis Pipeline <sup>3</sup>	\$750 / project	\$1000 / project	\$1500 / project

Client-Prepared Pool of Amplicons (per whole run) – MiSeq (300+300 bp PE)					
	Academic Commercial				
	Per run	Per run			
MiSeq Sequencing Run (~20-25 M PE reads)	\$3200	\$4700			

Small Genomes (>100X typical 5 Mb genome) – MiSeq (300+300 bp PE)					
	Acad	emic	Commercial		
	Per run of 24	Per genome	Per run of 24	Per genome	
Library Preparation + Sequencing (~1 M PE reads = 2 M single reads & 600 Mb/genome)	\$5040	\$210	\$7200	\$300	
Bioinformatics Analysis Pipeline Under Development	inquire		inqı	ıire	

Metagenomes – MiSeq (300+300 bp PE)				
	Acad	emic	Commercial	
	Per run of 6	Per sample	Per run of 6	Per sample
Library Preparation + Sequencing (~4 M PE reads = 8 M single reads & 2.4 Gb/sample)	\$3960	\$660	\$5400	\$900
DNA Extraction <sup>2</sup>	\$84	\$14	\$96	\$16
Standard Bioinformatics Analysis Pipeline <sup>4</sup>	\$750 / project		\$1500 / project	

Metagenomes – NextSeq (150+150 bp PE)				
	Academic		Commercial	
	Per run of 96	Per sample	Per run of 96	Per sample
Library Preparation + Sequencing (~4 M PE reads = 8 M single reads & 1.2 Gb/sample)	\$13440	\$140	\$19200	\$200
DNA Extraction <sup>2</sup>	\$1344	\$14	\$1536	\$16
Standard Bioinformatics Analysis Pipeline <sup>4</sup>	\$750 / project		\$1500 / project	

Metatranscriptomes – NextSeq (150+150 bp PE)				
	Academic		Commercial	
	Per run of 24	Per sample	Per run of 24	Per sample
Library Preparation + Sequencing (~4 M PE reads = 8 M single reads & 1.2 Gb/sample)	\$13200	\$550	\$19200	\$800
RNA Extraction <sup>2</sup>	\$336	\$14	\$384	\$16
Bioinformatics Analysis Pipeline Under Development	inquire		inqu	ire

## **Notes/Details:**

- 1. One control well is required per 96-well PCR library plate, hence a maximum of  $4\times95 = 380$  samples can be done together on one MiSeq run.
- 2. Extra costs may be incurred if samples, due to their nature, require more specialized (length, cost, etc.) extraction procedures.
- 3. Details of our 16S pipeline are available at <a href="https://github.com/mlangill/microbiome-helper/wiki">https://github.com/mlangill/microbiome-helper/wiki</a>, but the following is a summary of the major deliverables clients will receive (analyses will require a "mapping file" from the clients containing any relevant metadata for the study):
  - Combined FASTA file of the quality-controlled sequences (formatted for use in QIIME)
  - Final OTU tables in text, BIOM and STAMP formats (from open-ref. picking at 97%)
  - FASTA file of representative sequences (one per OTU)
  - Taxonomic assignment files at various levels (ex: phylum, genus, etc.)
  - Alpha-diversity rarefaction plots
  - Beta-diversity UniFrac plots
  - Functional prediction files generated from PICRUSt
- 4. Details of our metagenomics pipeline are available at <a href="https://github.com/mlangill/microbiome-helper/wiki">https://github.com/mlangill/microbiome-helper/wiki</a>, but the following is a summary of the major deliverables clients will receive (analyses will require a "mapping file" from the clients containing any relevant metadata for the study):
  - FASTA files of the final sequences screened to remove human (or other) contaminants
  - Taxonomic composition of the samples from MetaPhlAn 2.0 (text and STAMP files)
  - Functional prediction files generated from HUMAnN (text and STAMP files) for individual KO numbers, KEGG modules and KEGG pathways

**Custom Bioinformatics**: Additional bioinformatic analyses can be requested at an hourly rate or through research collaboration. Please contact us for more details.

**Customs primers/amplicons:** Beyond the 16/18S/ITS amplicons offered "in-stock", essentially any PCR amplicon (max. size  $\sim 550$  bp) can be adapted to our MiSeq system. Please consults us for primer design/protocol details.

**Processing time:** Time to completion may be variable depending the amount of other partial projects in the queue – this applies primarily to amplicon runs when providing less than the full capacity of 380 samples, but may also occur when submitting small numbers of samples for metagenomics runs (<6 for MiSeq or <96 for NextSeq).