

**Packages**

<b>Whole Genome Sequencing (WGS)</b>	includes sample prep, ~30x's coverage (~90Gbp) , SNP report.
<b>Exome sequencing</b>	includes sample enrichment, ~100x's coverage (~4Gbp), SNP and target coverage reports.

**Ala carte**

<b>PacBioRS</b>			
<b>Library Prep</b>	Long read or circular consensus		
<b>Sequencing</b>	<b>~ read length (bp)</b>	<b>~ Mbp/SMRTCell</b>	<b>Automated preliminary draft assembly</b>
long read	1000	15	included
circ. consensus	150	2.25	N/A

**ILLUMINA LIBRARY PREP**

Low-throughput	RNA / smRNA / DNA / ChIP
Low-throughput	DSN RNA
Low-throughput	Long insert / mate-pair
High-throughput	48 samples well-plate format

**ILLUMINA GAIIx**

- o Flexible for low and high-throughput needs, single & multiple lane needs
- o Up to 12-plex per lane
- o Typically faster turnaround times than HiSeq

single / paired	by	cycles	Average passing reads per lane	~Gbp / lane
1	x	36	25,000,000	0.9
1	x	54	25,000,000	1.4
1	x	72	25,000,000	1.8
1	x	90	25,000,000	2.3
1	x	108	25,000,000	2.7
1	x	125	25,000,000	3.1
2	x	36	25,000,000	1.8
2	x	54	25,000,000	2.7
2	x	72	25,000,000	3.6
2	x	90	25,000,000	4.5
2	x	108	25,000,000	5.4
2	x	125	25,000,000	6.3
2	x	150	25,000,000	7.5

**ILLUMINA HiSeq 2000**

- o Good for high-throughput needs, multiple lane needs
- o Up to 12-plex per lane
- o Turnaround time dependent on projects ability to fill all lanes of flowcell (or wait for other projects to fill flowcell).

		cycles	Average passing reads per lane	~Gbp / lane
1	x	50	80,000,000	4
1	x	100	80,000,000	8
2	x	50	80,000,000	8
2	x	100	80,000,000	16
2	x	125	80,000,000	20
2	x	150	80,000,000	24

**INFORMATICS**

Award winning Alpheus variant, expression, and target detection

<b>References</b>	Mouse, Human, Rat, Arabidopsis, Medicago, Soy, Maize
	Reports only
	Website/DB version
	Custom analysis available

**GENOTYPING**

Choose chips to use below and call for pricing. Discount on large quantities.

- Ag [http://www.illumina.com/applications.ilmn#whole\\_genome\\_genotyping\\_and\\_copy\\_number\\_variation\\_analysis](http://www.illumina.com/applications.ilmn#whole_genome_genotyping_and_copy_number_variation_analysis)
- Human [http://www.illumina.com/applications.ilmn#whole\\_genome\\_genotyping\\_and\\_copy\\_number\\_variation\\_analysis](http://www.illumina.com/applications.ilmn#whole_genome_genotyping_and_copy_number_variation_analysis)

**Other services, please inquire**