

Quantitative Advances Since the Human Genome Project (HGP)

	HGP Begins	HGP Ends	10 Years after HGP
Genome Sequencing			
Cost to Generate a Human Genome Sequence	~\$1 billion	~\$10-50 million	~\$3-5 thousand
Time to Generate a Human Genome Sequence	~6-8 years	~3-4 months	~1-2 days
Human Genome Sequences	0	1	Thousands
Genome Sequence Data			
Total DNA Bases in GenBank	~49 million	~31 terabases	~150 terabases
Whole-Genome Shotgun Bases in GenBank	0	~9.6 terabases	~391 terabases
Vertebrate Genome Sequences	0	3	112
Non-Vertebrate, Eukaryotic Genome Sequence	0	14	455
Prokaryotic Genome Sequences	0	167	8760
Human Single-Nucleotide Polymorphisms	~4.4 thousand	~3.4 million	~53.6 million
Human Genetics			
No. Genes with Known Phenotype/ Disease-Causing Mutation	53	1474	2972
No. Phenotypes/Disorders with Known Molecular Basis	61	2264	4847
No. Published Genome-Wide Association Studies (GWAS)	0	0	1542
Replicated Disease-Associated Genetic Variants	0	6	~2900
Genomic Medicine			
Drugs with Pharmacogenomics Information on Label	4	46	106

Since the beginning of the Human Genome Project 23 years ago, genomic data have steadily accumulated, laying the foundation for advances in human health.

Data compiled from various sources by National Human Genome Research Institute.