

Genome

The genome is an organism's complete set of genetic instructions. Each genome contains all of the information needed to build that organism and allow it to grow and develop. The genome includes both the genes and the non-coding sequences of the DNA/RNA. The human genome contains about 35,000 genes.

The Human Genome Project, completed in 2003, was an international effort to identify all the genes in human DNA, and to determine the sequences of the 3 billion base pairs of DNA. It took 13 years.

Genome research has helped diagnose diseases and find genetic markers for certain diseases.