Human Genome Project (HGP)

The Human Genome Project (HGP) was one of the great feats of exploration in history - an inward voyage of discovery rather than an outward exploration of the planet or the cosmos; an international research effort to sequence and map all of the genes - together known as the genome - of members of our species, Homo sapiens. Completed in April 2003, the HGP gave us the ability, for the first time, to read nature's complete genetic blueprint for building a human being.

John Craig Venter (born October 14, 1946) is an American biotechnologist, biochemist, geneticist, and businessman. He is known for being involved with sequencing the second human genome and assembled the first team to transfect a cell with a synthetic chromosome. Venter founded Celera Genomics, The Institute for Genomic Research (TIGR) and the J. Craig Venter Institute (JCVI). He was the co-founder of Human Longevity Inc., served as its CEO until 2017, and is executive chairman of the board of directors.[4] He was listed on Time magazine's 2007 and 2008 Time 100 list of the most influential people in the world. In 2010,

the British magazine New Statesman listed Craig Venter at 14th in the list of "The World's 50 Most Influential Figures 2010". He is a member of the USA Science and Engineering Festival's Advisory Board.



DNA Sequencer



The \$1,000 Genome

The "\$1,000 genome" catchphrase was first publicly recorded in December 2001 at a scientific retreat to discuss the future of biomedical research following publication of the first draft of the Human Genome Project, convened by the National Human Genome Research Institute at Airlie House in Virginia. The phrase neatly highlighted the chasm between the actual cost of the Human Genome Project, estimated at \$2.7 billion over a decade, and the benchmark for routine, affordable personal genome sequencing. Scientists think that they will need to sequence hundreds of thousands or even millions of people to truly understand how genes influence disease so that better drugs and treatments can be developed. They say that \$1,000 genomes are needed to enable the huge sequencing studies that could lead to breakthroughs in personalized medicine.

