



ABOUT

Biographies



J. Craig Venter, Ph.D.

Founder, Chairman, and Chief Executive Officer
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Research Interests and Accomplishments

J. Craig Venter, Ph.D., is regarded as one of the leading scientists of the 21st century for his numerous invaluable contributions to genomic research. He is founder, chairman, and CEO of the J. Craig Venter Institute (JCVI), a not-for-profit, research organization with approximately 250 scientists and staff dedicated to human, microbial, plant, synthetic and environmental genomic research, and the exploration of social and ethical issues in genomics.

Dr. Venter is co-founder, executive chairman and co-chief scientist of Synthetic Genomics Inc (SGI), a privately held company focused on developing products and solutions using synthetic genomics technologies.

Dr. Venter is also a co-founder, executive chairman and CEO of Human Longevity Inc (HLI), a San Diego-based genomics and cell therapy-based diagnostic and therapeutic company focused on extending the healthy, high performance human life span.

Dr. Venter began his formal education after a tour of duty as a Navy Corpsman in Vietnam from 1967 to 1968. After earning both a Bachelor's degree in Biochemistry and a Ph.D. in Physiology and Pharmacology from the University of California at San Diego, he was appointed professor at the State University of New York at Buffalo and the Roswell Park Cancer Institute. In 1984, he moved to the National Institutes of Health campus where he developed Expressed Sequence Tags or ESTs, a revolutionary new strategy for rapid gene discovery. In 1992 Dr. Venter founded The Institute for Genomic Research (TIGR, now part of JCVI), a not-for-profit research institute, where in 1995 he and his team decoded the genome of the first free-living organism, the bacterium *Haemophilus influenzae*, using his new whole genome shotgun technique.

In 1998, Dr. Venter founded Celera Genomics to sequence the human genome using new tools and techniques he and his team developed. This research culminated with the February 2001 publication of the human genome in the journal, *Science*. He and his team at Celera also sequenced the fruit fly, mouse and rat genomes.

Dr. Venter and his team at JCVI continue to blaze new trails in genomics. They have sequenced and analyzed hundreds of genomes, and have published numerous important papers covering such areas as environmental genomics, the first complete diploid human genome, and the groundbreaking advance in creating the first self-replicating bacterial cell constructed entirely with synthetic DNA.

Dr. Venter is one of the most frequently cited scientists, and the author of more than 280 research articles. He is also the recipient of numerous honorary degrees, public honors, and scientific awards, including the 2008 United States National Medal of Science, the 2002 Gairdner Foundation International Award, the 2001 Paul Ehrlich and Ludwig Darmstaedter Prize and the King Faisal International Award for Science. Dr. Venter is a member of numerous prestigious scientific organizations including the National Academy of Sciences, the American Academy of Arts and Sciences, and the American Society for Microbiology.

Select Publications

[Gibson DG, Venter JC](#)

Synthetic Biology: Construction of a Yeast Chromosome.

Nature. 2014 May 08; 509: 168-9. [\[more\]](#)

[Tagwerker C, Dupont CL, et al.](#)

Sequence Analysis of a Complete 1.66 Mb *Prochlorococcus marinus* MED4 Genome Cloned in

Yeast.

Nucleic Acids Research. 2012 Nov 01; 40: 10375-83. [\[more\]](#)

[Gibson, D. G., Glass, J. I., et al.](#)

Creation of a Bacterial Cell Controlled by a Chemically Synthesized Genome

Science. 2010 Jul 02; 329(5987): 52-6. [\[more\]](#)

[Gibson, D. G., Benders, G. A., et al.](#)

Complete Chemical Synthesis, Assembly, and Cloning of a Mycoplasma genitalium Genome

Science. 2008 Jan 24; 319(5867): 1215-20. [\[more\]](#)

[Levy, S., Sutton, G., et al.](#)

The Diploid Genome Sequence of an Individual Human

PLoS Biol. 2007 Sep 04; 5(10): e254. [\[more\]](#)

[Lartigue, C., Glass, J. I., et al.](#)

Genome Transplantation In Bacteria: Changing One Species to Another

Science. 2007 Aug 03; 317(5838): 632-8. [\[more\]](#)

[Venter, J. C., Remington, K., et al.](#)

Environmental Genome Shotgun Sequencing of the Sargasso Sea

Science. 2004 Apr 02; 304(5667): 66-74. [\[more\]](#)

[Smith, H. O., Hutchison, C. A., 3rd, et al.](#)

Generating a Synthetic Genome by Whole Genome Assembly: PhiX174 Bacteriophage from Synthetic Oligonucleotides

Proc Natl Acad Sci U S A. 2003 Dec 23; 100(26): 15440-5. [\[more\]](#)

[Kirkness, E. F., Bafna, V., et al.](#)

The Dog Genome: Survey Sequencing and Comparative Analysis

Science. 2003 Sep 26; 301(5641): 1898-903. [\[more\]](#)

[Mural, R. J., Adams, M. D., et al.](#)

A Comparison of Whole-genome Shotgun-derived Mouse chromosome 16 and the Human Genome

Science. 2002 May 31; 296(5573): 1661-71. [\[more\]](#)

[Venter, J. C., Adams, M. D., et al.](#)

The Sequence of the Human Genome

Science. 2001 Feb 16; 291(5507): 1304-51. [\[more\]](#)

[Myers, E. W., Sutton, G. G., et al.](#)

A Whole-genome Assembly of Drosophila

Science. 2000 Mar 24; 287(5461): 2196-204. [\[more\]](#)

[Fleischmann, R. D., Adams, M. D., et al.](#)

Whole-genome Random Sequencing and Assembly of Haemophilus influenzae Rd

Science. 1995 Jul 28; 269(5223): 496-512. [\[more\]](#)

[Adams, M. D., Kelley, J. M., et al.](#)

Complementary DNA Sequencing: Expressed Sequence Tags and Human Genome Project

Science. 1991 Jun 21; 252(5013): 1651-6. [\[more\]](#)

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