



Pioneering Genomics
to Positively Impact Life



Genomic Pioneers

Dr. Venter realized early in his career that the rigidity and risk-adverse nature of traditional research organizations was not always conducive to scientific breakthroughs, so he decided to create one of his own. JCVI, founded in 1992 as The Institute for Genomics Research or TIGR, was a new kind of nonprofit research institute that gave scientists the freedom to pursue disruptive concepts and encouraged innovation to positively impact life.



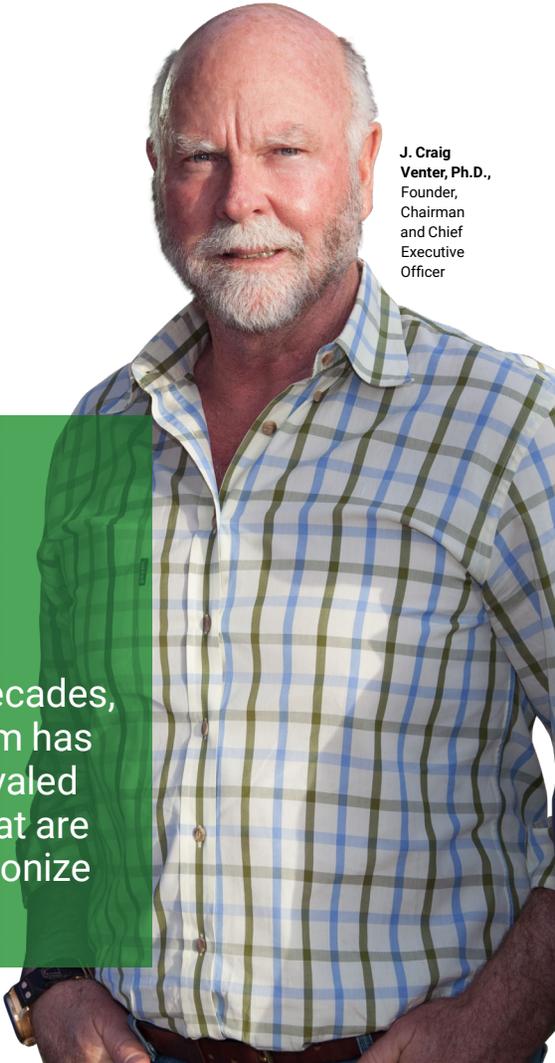
JCVI

The J. Craig Venter Institute (JCVI) is a world leader in genomic research with 160 scientists and staff who are bold innovators fearlessly pursuing revolutionary ideas. With a long track-record of creativity and an interdisciplinary approach to genomics, JCVI is committed to accelerating foundational scientific research to drive advances in human health and environmental sustainability.

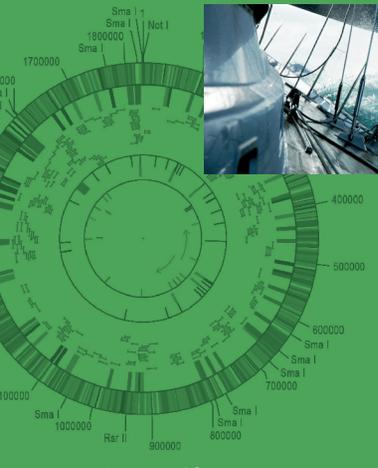


J. Craig Venter, Ph.D.,
Founder,
Chairman
and Chief
Executive
Officer

For more than two decades, this scientific freedom has inspired a set of unrivaled accomplishments that are continuing to revolutionize genomic research.



A History of Breakthroughs



J. Craig Venter receives National Medal of Science from President Obama



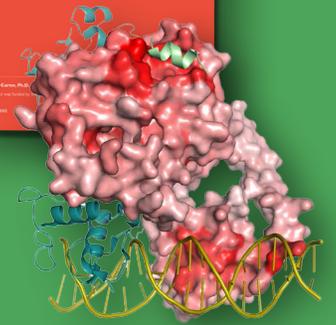
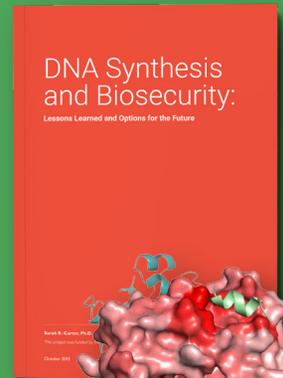
Discovered more than 80 million new genes and thousands of new species during the Sorcerer II Global Ocean Sampling Expedition



Conducted first metagenomic analysis of human gut microbiome



Sequenced over 17,000 influenza genomes and developed algorithm to predict optimal future flu vaccine composition



Created 1,000 3-D protein structures to be used for drug and vaccine research



Sequenced first genome of a free-living organism, *H. influenzae*

Sequenced first draft human genome



2003

Published first complete human diploid genome, that of Dr. Venter, which encompasses both sets of chromosomes from each parent



Sequenced genome of *Neisseria meningitidis* and identified candidate genes for FDA-approved vaccine



2010

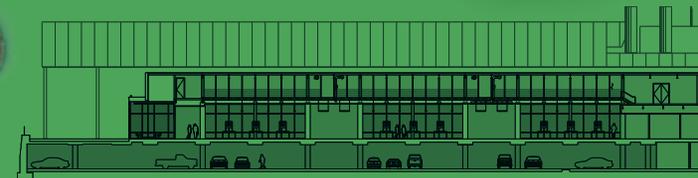
Constructed first synthetic bacterial cell



What's Next?

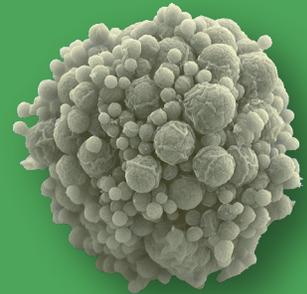
2013

Opened world's first net zero energy biological Laboratory in La Jolla, California



2016

Designed and constructed first synthetic minimal bacterial cell



Today, our researchers are building upon a solid legacy of success as they continue to push the boundaries of genomics to improve our understanding of **human health and performance, environmental sustainability, the microbiome, synthetic biology, and infectious disease.**



The Future of Genomics

Today, our researchers are building upon a solid legacy of success as they continue to push the boundaries of genomics for the betterment of society. Our scientific programs include:

Human Health—genomic interpretation, and understanding the interaction between genotype and phenotype for health optimization

Human Microbiome—building on decades of leadership and taking next steps toward viable, safe therapeutics; understanding the microbiome's role in a variety of diseases

Infectious diseases—devoted to understanding mechanisms of pathogen evolution, drug resistance, and virulence.

Environmental genomics—focused on discovering the diversity of life in the oceans, soil and air, as well as harnessing microbial processes to help clean up the environment.

Synthetic biology—gaining a deeper understanding of basic biology to help advance new approaches to rapid vaccine and therapeutics, and to design alternative energy sources by modifying the metabolic capacity of microorganisms.

DNA sequencing and analysis—which underpins our ability to interpret the vast amounts of genomic data generated by JCVI and our collaborators all over the globe.

Center for Single Cell Genomics (CSCG)—provides dedicated support for research requiring genomic analysis at the single cell level using novel techniques developed at JCVI.

JCVI Policy Center—to examine the societal impacts of advancements in genomics research.

Science Education—events, outreach and training programs within our communities to help enhance science literacy and build the next generation of scientists.

Research Faculty

Distinguished Professors

J. Craig Venter, Ph.D.
Hamilton O. Smith, MD, Nobel Laureate in Physiology or Medicine
Clyde A Hutchison III, Ph.D.

Professors

Andy Allen, Ph.D.
Derrick E. Fouts, Ph.D.
Robert M. Friedman, Ph.D.
Malcolm Gardner, Ph.D.
John I. Glass, Ph.D.
Ewen Kirkness, Ph.D.
Weizhong Li, Ph.D.
Todd P. Michael, Ph.D.
Karen E. Nelson, Ph.D.
Richard Scheuermann, Ph.D.

Associate Professors

Christopher Dupont, Ph.D.
Marcelo Friere, DDS, Ph.D., DMedSc
Naisha Shah, Ph.D.
Daniel G. Gibson, Ph.D.
Sanjay Vashee, Ph.D.

Assistant Professors

Sinem Beyhan, Ph.D.
Anna Edlund, Ph.D.
Norberto Gonzalez-Juarbe, Ph.D.
Hernan A. Lorenzi, Ph.D.
Lauren Oldfield, Ph.D.
Yu (Max) Qian, Ph.D.
Yo Suzuki, Ph.D.
Gene Tan, Ph.D.
Yanbao Yu, Ph.D.
Lisa Zeigler-Allen, Ph.D.
Sarah Smith, Ph.D.

Executive Management



J. Craig Venter, Ph.D.,
Founder, Chairman and
Chief Executive Officer



Karen E. Nelson, Ph.D.,
President and Professor,
Genomic Medicine Group



Heather Kowalski,
Chief Operating Officer



Pamela Brar, MD,
Chief Medical Officer



Marty Stout,
Chief Technology Officer



Julie Adelson, Esq.,
VP and General Counsel



Jill Mullen,
Sr. VP, Philanthropy and
Strategic Alliances



Antony G. Peake, CRA,
VP, Research
Administration



Mary Yumul, SPHR,
VP, Human Resources



Richard Scheuermann, Ph.D.,
Professor and La Jolla
Campus Director

JCVI

J. CRAIG VENTER
INSTITUTE

La Jolla, California
4120 Capricorn Lane
La Jolla, CA 92037
858-200-1800

Rockville, Maryland
9605 Medical Center Drive, Suite 150
Rockville, MD 20850
301-795-7000

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