

Dr J. Craig Venter BSc, PhD

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 President of the J. Craig Venter Institute (JCVI), a not-for-profit research organization with approximately 400 scientists and staff dedicated to human, microbial, plant and environmental genomic research, the exploration of social and ethical issues in genomics and to seeking alternative energy solutions through genomics.

Dr. Venter is also Founder and CEO of Synthetic Genomics Inc., a privately held company dedicated to commercializing genomic-driven solutions to address global energy and environmental challenges.

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 PhD 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. Using ESTs he and his team discovered thousands of new human genes while at NIH. In 1992 Dr. Venter founded The Institute for Genomic Research (TIGR), 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. This led to the rapid and accurate decoding of hundreds of important genomes including human viral and bacterial pathogens, environmental microbes, insect, plant and mammalian genomes.

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 research having sequenced hundreds of genomes, and have published numerous important papers covering such areas as environmental genomics, synthetic genomics and the first complete diploid human genome in 2007.

Dr. Venter, one of the most frequently cited scientists, is the author of more than 250 research articles. He is also the recipient of numerous honorary degrees, public honours and scientific awards, including the 2008 United States National Medal of Science, the 2002 Gairdner Foundation International Award and the 2001 Paul Ehrlich and Ludwig Darmstaedter Prize. 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.

It is fitting that the Faculty of Science recognise such a distinguished scientist through the award of the Doctor of Science *honoris causa*.