John D. Carpten, PhD
SU2C Scientific Advisory Committee

John D. Carpten, PhD
Institute of Translational Genomics,
Keck School of Medicine of University of Southern California
Member, Stand Up To Cancer Scientific Advisory Committee
Member, Stand Up To Cancer Health Equity Committee
Los Angeles, CA

John D. Carpten, PhD, is an internationally recognized expert in genome science, and possesses unique training in multiple disciplines including germline genetics for disease risk and predisposition, somatic cancer genomics, health disparities research, cell biology, functional genomics, and precision medicine.

Dr. Carpten earned his Ph.D. from the Ohio State University in 1994 with a focus on human genetics. He then went on to complete a postdoctoral fellowship at the National Human Genome Research Institute, NIH, Bethesda, in Cancer Genetics, where he was later promoted to the tenure track in 2000. Then in 2003, Dr. Carpten accepted a position to become Division Director, Division of Integrated Cancer Genomics, at the Translational Genomics Research Institute (TGen), Phoenix, AZ. Later, in 2012 he was promoted to the position of Deputy Director of Basic Research for TGen. In 2016 he was recruited by the University of Southern California Keck School of Medicine, to build and chair a new Department and Institute of Translational Genomics.

Dr. Carpten's primary research program centers around the development and application of cutting edge genomic technologies and bioinformatics analysis in search of germ-line and somatic alterations that are associated with cancer risk and tumor characteristics, respectively. A major focus of Dr. Carpten's research has been related to prostate cancer genetics. He was a lead author on the first genome wide scan for hereditary prostate cancer genes (Science. 1996 Nov 22;274(5291):1371-4.), and the identification of HOXB13 as the first true hereditary prostate cancer gene (New England Journal of Medicine. 2012 Jan 12;366(2):141-9.). His group has also discovered a number of single nucleotide polymorphisms, which confer increased risk of developing prostate cancer (Journal of the National Cancer Institute. 2007 Dec 19;99(24):1836-44.). Furthermore, he has played a critical role in prostate cancer cell biology studies (Nat Genet. 2004 Sep;36(9):979-83.), and prostate cancer tumor genome profiling studies (Genome Res. 2011 Jan;21(1):47-55.).

Dr. Carpten has also been an early pioneer in the understanding the role of biology in disparate cancer incidence and mortality rates seen among underrepresented populations. Through his leadership, the African American Hereditary Prostate Cancer Study (AAHPC) Network was conceived. This study has become a model for genetic linkage studies in underrepresented populations and led to the first genome wide scan for prostate cancer susceptibility genes in African Americans (Prostate. 2007 Jan 1;67(1):22-31.).

Dr. Carpten has received research funding awards from various sources to support his research including NIH, Prostate Cancer Foundation, Susan G. Komen for the Cure, Multiple Myeloma Research Foundation, and a number of pharmaceutical companies. Dr. Carpten has co-authored over 160 publications in scientific journals that include Science, Nature, Nature Genetics, Genome Research, Cancer Research, Molecular Cancer Research, Cancer Cell, and the New England Journal of Medicine.