

Vernon L. Smith Biography

Vernon L. Smith was born in the flat plains of Wichita, Kansas during the boom years preceding the Great Depression, January 1, 1927. Born to politically active parents – and an avowedly Socialist mother who revered Eugene Debs – Vernon Smith’s early ideological indoctrination would prove pivotal to his attraction to the economic sciences.

While earning his bachelor’s degree in electrical engineering at the California Institute of Technology in 1949 Smith took a general economics course. Intrigued, Smith pursued the science, receiving a Masters in Economics from the University of Kansas in 1952 and a Ph.D. from Harvard University in 1955.

Dr. Smith’s initial training in the hard sciences lead him to pursue the application of the scientific method in his chosen profession, and social science, of economics. Predisposed to have the heart of a socialist, Dr. Smith expected to prove the inefficiencies of market mechanisms when he conducted his first economic experiments in 1956 at Purdue University, using his students as subjects. However, Dr. Smith’s experiments – testing economic concepts and theories under controlled conditions – instead overwhelmingly demonstrated to him the clear efficiencies of markets. Smith found that even with very little information and a modest number of participants, subjects converge rapidly to create a competitive equilibrium.

Specifically, Smith’s experiments proved large numbers of perfectly informed economic agents were not prerequisites for market efficiency – a radical departure from conventional economic thought. Smith compiled his early experiments and in 1962, while a Visiting Professor at Stanford University, published his findings in the Journal of Political Economy. The article, “*An Experimental Study of Market Behavior*,” is today considered the landmark paper on experimental economics.

Continuing his work, again at Purdue University, Smith conducted more and more experiments while also becoming well known as an expert in capital theory formation and an early pioneer in the field of environmental economics. Widening the interest in academia, Smith continued to research and teach experimental methods, as well as explore new avenues, at Brown University, University of Massachusetts, University of Southern California, California Institute of Technology and the University of Arizona.

Displaying a unusual breadth of academic understanding and application, Smith has published and co-published numerous seminal works exploring, and defining, experimental economics as well as other economic disciplines. His “*The Principle of Unanimity and Voluntary Consent in Social Choice*” published in the Journal of Political Economy in 1977 initiated the systematic study of institutional design for public choice decisions. The 1982 “*Microeconomic Systems as an Experimental Science*” in the American Economic Review marked the still adhered-to methodology for experimental economics. His 1982 “*A Combinatorial Auction Mechanism for Airport Time Slot Allocation*” in the Bell Journal of Economics provided a real-world application of experimental economics on economic systems design. The 1988 “*Bubbles, Crashes and Endogenous Expectations in Experimental Spot Asset Markets*” published in Econometrica examined stock market bubbles and rational expectations. The 1994 “*Preferences, Property Rights and Anonymity in Bargaining Games*” in Games and Economic Behavior started the systematic study of personal exchange.

At the same time the slow but steady development in experimental economics begun by Smith in the 1950s and 1960s was superseded by accelerated development in the 1970s and 1980s. After establishing himself as the field’s preeminent researcher, Smith collaborated with several noted economists to refine and improve his subject.

From Smith’s foundation of research, the modern experimental methods in economics began to gain acceptance. The research expanded to include the economic performance of many real-world institutions. Attempts to apply laboratory experimental methods to policy problems became systematic. The convergence properties of multiple markets were discovered. Conspiracy, price controls and other types of market interventions were examined experimentally for the first time. New forms of markets were studied, such as methods for deciding on programs for public broadcasting. All this research stems from the initial contributions of Dr. Vernon Smith.

In 2001 Dr. Smith and six of his colleagues left the Economic Science Laboratory at the University of Arizona, founded by Dr. Smith, to form the Interdisciplinary Center for Experimental Science (ICES) at George Mason University, which Dr. Smith now directs.

The decision to move to George Mason University was based on its proximity to Washington, D.C. and ICES' desire to make more ripples in public policy circles. In addition, Smith and his colleagues were impressed with the emphasis on market-oriented economics at George Mason and the Mercatus Center, where Dr. Smith is now a research fellow. The move was possible due to a generous gift from the Charles G. Koch Foundation.

At ICES Dr. Smith and colleagues continue to conduct economic experiments and solidify the application of developed knowledge. Current research is focused on the design and testing of markets for electric power, water and spectrum licenses. Dr. Smith and his colleagues have also worked with the Australian and New Zealand governments on privatization issues, developed market designs for the Arizona stock exchange, and designed an electronic market for water in California.

Dr. Smith's groundbreaking work has led to an explosion in the application of laboratory experimental methods. Volumes of experimental papers are being published each year and the number of experimental laboratories are growing rapidly around the world. ICES is now the preeminent facility serving as a model for experimental economic and laboratory development throughout the world.

Dr. Smith is married to Candace Smith, who has a Master's Degree in Economics Education, and has won numerous Statewide and national awards for her excellence in teaching high school students.