



IN MEMORIAM

Raymond Jessen
Professor of Statistics, Emeritus
Los Angeles
1910–2003

When Ray Jessen died on December 14, 2003, at the age of 93, the Anderson Graduate School of Management lost forever a longtime eminent statistician.

Ray was born in San Francisco, but his family moved to Washington when he was quite small. He grew up on a farm outside a small town across the Columbia River from Portland. He developed a life-long interest in agriculture and in growing unusual plants. He was physically vigorous and played high school football, often in the mud. After graduation, he worked in the timber industry. This background nurtured his characteristic independence of thought. An uncle encouraged him to go on to a university, and he chose to give UC Berkeley a try. He was not bothered by having to support himself and received a Bachelor of Science in agricultural economics in 1937.

Ray enjoyed the challenging minds he encountered in many of his professors and one of them suggested that he further his interest in agriculture at the graduate level. At Iowa State College, the inventive statistician William Cochran suggested that Ray look into sampling as a way of estimating agricultural production. The result was Ray's Ph.D. thesis in which he originated the idea of area sampling and developed and used it for estimating farm facts. The Ph.D. was awarded in 1943 and he quickly achieved the rank of professor at Iowa State. Ray was not particularly interested in administration, but from 1947 to 1950, he was acting head of the newly created Department of Statistics. His early election as a Fellow of the American Statistical Association in 1949 pays tribute to his standing as a statistician. He was an editorial collaborator for its Journal as well as the Journal of Farm Economics.

Ray's unique background was in statistical sampling methods in a wide variety of applications. Many of these were for local, state, national and international agencies including the U.S. Departments of Agriculture, State, Commerce and Interior, the Census Bureau, the California Department of Public Health, the U.S. Surgeon General's Advisory Committee on Health Statistics, and the United Nations Food and Agricultural Organization. He also served as an advisor to such firms as International Harvester Corporation, General Foods, Jet Propulsion Laboratory and the System Development Corporation.

Ray was an internationally acknowledged master of sampling surveys from survey design to execution to analysis. This is a difficult art that deals with defining populations, question formulation, measurement that very often involves establishing interview techniques and the unreliability of respondents, with each new application area generating its own special problems.

One of his more unique applications was a survey of the quail population in Iowa that was a prototype for wild life surveys in general. He designed surveys to estimate the orange crop in Florida as a part of his work on a master sample of agriculture. He was the head of a team that evaluated radio and TV rating procedures. He did population and housing surveys in Peru and Argentina. A major assignment was the leadership of a mission of American and British experts to Greece in 1946 that called for extreme resourcefulness and creativity in designing and executing sampling methods to assess the completeness of the electoral lists for the post-war elections. For national planning in less developed countries where time and resources are limited, he proposed a "suggestive sample" versus an "enumerative census" because it would be quick and cheap.

Ray moved to Los Angeles in 1957 at the invitation of George Brown and Alex Mood, both former colleagues at Ames, to become a project director at CEIR, a consulting firm that they had organized in West Los Angeles. In 1958, he joined the faculty at UCLA on a part-time basis to teach a course on sampling surveys. In 1962 it was made permanent and full-time with a joint appointment to both the schools of business and public health.

At UCLA he was active in public health and helped to establish a survey research center, of which he was director from 1966 to 1969, to improve the quality of surveys in the health-related sciences. He chaired six doctoral and six master's thesis committees in the management school. With Paul Hoel (UCLA mathematics department), he co-authored the popular book *Basic Statistics for Business/ Economics* (Wiley, 1971).

We remember Ray with words like innovative, artful, personable, modest, cooperative, diligent, honest, and, most of all, friend.

Glenn Graves
Ray Mickey
Clay Sprowls