

Jack Carl Kiefer

January 25, 1924 — August 10, 1981

Jack Carl Kiefer was born in Cincinnati, Ohio, on January 25, 1924. He died of a heart attack in Berkeley, California, on August 10, 1981.

Jack Kiefer graduated from the Massachusetts Institute of Technology with a degree in electrical engineering (class of '43) and served in the air force during World War II. He earned a master's degree in economics from MIT in 1948. He studied under Jack Wolfowitz at Columbia University and received his Doctor of Philosophy degree in 1952. He became an instructor at Cornell in 1951 and continued to be a valuable and illustrious member of the faculty for twenty-eight years, from 1973 on as Horace White Professor of Mathematics. In 1957 he married Dooley Sciple, and Jack and Dooley soon became a very important couple in the department. In 1979 he took early retirement and became professor of statistics at the University of California at Berkeley.

Jack was internationally recognized as a leader in mathematical statistics. His papers—he wrote over one hundred—range over most parts of statistics, including among others coding theory, minimax procedures, tests of fit, and the study of sample distribution functions. The topic in which his contribution was most basic and most important is the design of experiments; he has been referred to as “father of experimental design.” He worked in this field throughout his life and brought many different mathematical tools to bear on it. His results have found a large variety of applications in scientific research and in industry.

His distinguished work was recognized by many honors. Kiefer was elected to the National Academy of Sciences in 1975, he was a fellow of the American Academy of Arts and Sciences and a former president of the Institute of Mathematical Statistics, and he served on many committees of national and international societies during his tenure at Cornell and Berkeley. He was a visiting professor at Oxford University (1957-58), at Stanford University (1962-63), and at Berkeley (1975), held Guggenheim fellowships, and was a Wald lecturer. Most recently, Kiefer was one of two professors to initiate the Berkeley-Beijing exchange program in 1980.

In addition to his eminence as a scholar, Jack was a fine lecturer and a superb teacher. He was a successful and popular lecturer at both the undergraduate and the advanced level. He was also an excellent guide to his graduate students; some are now among the most distinguished mathematical statisticians of their generation.

Jack was a very special person—intelligent, sensitive, giving, and just. His sympathies and interests ranged wide, from political causes to stamp collecting, from a deep love of music to mushrooms. And everything that he did, he did remarkably well.

Not long after his interest in mushrooms was awakened by the visiting French mathematician Jacques Deny, he acquired an extensive knowledge of the places and the times at which one could find mushrooms in and around Ithaca. The collecting trips with his family and his friends were a great source of pleasure for him and them. He thought of himself as an amateur mycologist, but there was nothing amateurish about the scientific articles that he wrote on mushrooms. The mycologists at Cornell recognized him as an expert. Occasionally they would refer collectors to him for advice on classification.

Everyone who came in contact with Jack sensed his human warmth and sincerity. He was a very good, sympathetic listener, and he was always willing to give help where it was needed. The depth of his human commitment was shown by his devoted work for the causes he believed in: human rights, civil liberties, the Liberal party of New York State, the protest against the war in Vietnam, and environmental issues.

Another facet of his character was a fine sense of humor, which found delightful expression through his poems, produced for innumerable occasions. When he was president of the mathematical colloquium, every visiting speaker was welcomed with a graceful verse. While at MIT he wrote and directed some of the “Tech shows,” the annual musical comedies.

But there was a quality deeper than charm or friendliness that distinguished Jack. As his former colleague Paul Olum puts it: “There were many things that made Jack a special person: his intelligence, his exceptional ability in mathematics, his warmth and generosity of spirit, his commitment to human causes, his willingness to take a stand on issues, his sense of excitement about everything—books, music, mushrooms, stamps—at one time even politics and sailboats. But I think that the quality in Jack that meant most to me, that I admired and respected the most, was his complete honesty. It was a straightforward kind of honesty—not deliberate or self-conscious, as with some people—rather a natural, spontaneous integrity. It was that, together with his warmth and supportiveness, that made it so good to talk with him, that made him such a wonderful friend.”

Jack is survived by his wife, Dooley Sciple Kiefer; his daughter, Sarah, and his son, Daniel—both Cornell students; and his mother, Marguerite R. Kiefer, of Cincinnati.

Roger H. Farrell, Alex Rosenberg, Wolfgang H. Fuchs