

In Memoriam

Kenneth Willard Cooper Professor of Biology, Emeritus UC Riverside 1912-2005

Kenneth W. Cooper, a world-class biologist, with a rare intellect that examined all matters in an original and penetrating way, often with such gusto that it was like being subjected to a cavalry charge, died January 8, 2005. Born in Flushing, NY on November 29, 1912, Ken, from his youth, was an accomplished entomologist. Initially fond of beetles, he later acquired an intense interest in Hymenoptera (especially *Megachilidae*) and during his last years took up an interest in Hemiptera.

In his academic career, Ken was a first-rate geneticist and cell biologist; with exceptionally high standards for himself, as well as for others. As a graduate student at Columbia University, he chose Franz Schrader, a rigorous scholar in cell biology, as his doctoral mentor "because he was the only professor who would not give me an A in his course". Schrader in turn, following his own dictum that unusual cells reveal overlooked important features, urged Kenneth to study cell division in the eggs of a grass mite *Pediculopsis graminum*. Not fazed by the literature describing their sole habitat in Europe, Kenneth proceeded to find the mites in his own mother's back yard in Flushing. His doctoral thesis described their most unusual chromosomes and the fibers that led them apart in mitosis. Later, as an Associate Professor at Princeton University, he would mentor only one student as a PhD candidate, Shinya Inoue.

In 1937, At Columbia University, Ken met and married Ruth, nee Snyder. Ruth born, on December 13, 1913, was also an accomplished biologist. She acquired a BA degree with very high honors from Barnard College in 1935 and an MA in 1937 and PhD in 1943 from Columbia University. Ruth was content, as many women biologists of her generation were, to remain a research associate all her life. Yet before and after devoting her life to bringing up their children for nearly 18 years, she made original contributions in fields ranging from immunological embryology to cell biology. Ruth died on August 8, 2007.

After a brief stint at the University of Rochester, the Coopers arrived at Princeton University in 1939, where Ken taught advanced courses in cytogenetics and cell biology. In the breaks during their 13 years at Princeton, the Coopers, together with Franz and Sally-Hughes Schrader and Francis Ryan (Ruth's PhD mentor) would head off to Panama and Costa Rica to observe and collect unusual insects. In 1944 and 1945 they took two half-year sabbaticals at the California Institute of Technology where Ken was a John Simon Guggenheim Memorial Foundation

Fellow. The summers of 1946 to 1948 were spent at the Marine Biological Laboratory in Woods Hole, MA.

In 1949 and 1950 Ken and Ruth adopted two very young babies, a boy, Geoff, and a girl, Tera. In 1952, the Coopers moved to the University of Rochester for the second time in their lives. They left Rochester for Gainesville, FL in 1957 to free their young son Geoff from strep throat, too common in Rochester. After two years at the University of Florida, where Ken was the first Distinguished Graduate Research Professor, they left Gainesville in order not to bring up their children in an area where the Ku Klux Klan was still burning crosses. They headed north to Dartmouth College, New Hampshire, where a Rockefeller Foundation panel had recommended the development of a basic science medical school. Ken helped to transform the Dartmouth Medical School curriculum from a 2-year to a full 4-year program. When the cold climate contributed to Ruth's suffering from ECHO virus infection and Reynaud's symptom, the Coopers left for warmer California.

At UC Riverside, Kenneth was appointed an above-scale Professor for 1967-1981, while Ruth became a Research Associate in Ken's lab and worked on mitosis in the grass mite, *Siteroptis graminum*. Ken's primary teaching responsibility was an undergraduate course on chromosomes. As an emeritus Professor, Ken re-immersed himself until his death in 2005 in his life-long love of entomology. In retirement, the Coopers enjoyed their trips to the desert collecting wasps and beetles, and Ruth continued to take outstanding photographs of desert plants. In 1993, Kenneth named a rare and beautiful bee (*Holcopasites ruthae*), in Ruth's honor

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