



## IN MEMORIAM

William C. Reeves  
Professor of Epidemiology, Emeritus  
Berkeley  
1916-2004

William Carlisle Reeves died of a cerebral hemorrhage, subsequent to a fall, on September 19, 2004. He was 87 years old. Though officially retired in 1987 from the University of California, Berkeley, he continued to serve actively until shortly before his death: advising students, presenting occasional lectures and seminars, participating in research, and consulting with federal state and local public health agencies. He vigorously took part in a departmental faculty meeting on the day of his fall, just four days before his death. Reeves' former student, now chief of epidemiology at the Arbovirus Disease Branch of the Centers for Disease Control and Prevention (CDC), Roy Campbell, described him as, "... a giant in the field of arbovirology. When he talks, people listen". Indeed, Bill Reeves was the preeminent pioneer and expert on the causes and transmission of mosquito- borne viral encephalitides in the world. In fact, he invented the term arbovirus to describe these arthropod- borne (transmitted) diseases.

Reeves grew up on a ranch outside Riverside, California, the only child of William Claude Reeves and Abie Bessie Harriet Brant. His father kept bees, but Bill did not attribute his lifelong interest in "bugs" to his father's vocation. In fact, he seems to have had an aversion to bees. However, he did get his lifelong interest in fishing and hunting from his father, who took him on month- long trips into the California mountains after the "honey harvest" was over in late summer. His interest in entomology was encouraged and guided by his junior high school biology teacher. His friends and schoolmates dubbed him "Billy Bugs," an appellation he seems to have savored. Although neither of his parents had been educated beyond grammar school, they were determined that their son would get a college education.

Reeves began his college career at Riverside Junior College. More importantly, during two summers he worked at the Citrus Experiment Station of the Riverside campus of the University of California. There he came in contact with dedicated research scientists and graduate students from the University of California, Los Angeles. So, after completing the junior college program at Riverside, he moved on to Berkeley, which had the best undergraduate and graduate program in entomology in the west. In a bizarre incident when Reeves was well into his thesis research on the treehole mosquito, investigators in another institution learned about a key finding by Reeves. When they incorporated this information into their research, it led to prior publication by them. Reeves was, therefore, forced to begin his research again, and building on his previous work, he moved his project to the Hooper Foundation at the University of California, San Francisco. There he came under the tutelage and direction of the world- renowned virologist K. F. Meyer and there also he began his collaboration with virologist/ epidemiologist William M. Hammon. When an epidemic of Western Equine (WEE) and St. Louis Virus (SLE) encephalitis occurred in Yakima County, Washington in 1941, Meyer dispatched a team under Hammon's direction to investigate. Reeves played a major role in the investigation that resulted in the first isolation of viruses (WEE and SLE) from naturally infected mosquitoes (*Culex*

tarsalis). The resulting publications and Reeves's thesis are classics. With these accomplishments, at age 26, Reeves's career was launched.

Reeves got his master of public health (M.P.H.) degree from the School of Public Health at Berkeley in 1949. He was one of the first graduates from the newly established school, a school which was created due to the efforts of people like K. F. Meyer and William M. Harmon. Even while pursuing the M.P.H., Reeves was lecturing on epidemiology. He was, in large part, responsible for the growth and development of the epidemiology program at Berkeley, now one of the preeminent academic epidemiology programs in the country.

Bill Reeves's scientific accomplishments were substantial. He identified several previously unidentified viral agents of disease and new species of arthropod vectors. His research was always "goal oriented". That is, he was concerned with the potential his findings would have with regard to disease prevention. And, though his investigations took him as far afield as Guam and the Murray Valley in Australia, his focus was always on the Central Valley of California. Nor was his research ever "esoteric". He was always sensitive to practical issues of methodology. Thus, he devised the first mosquito "live trap", invented a tracking method by marking mosquitoes with a fluorescent dye, and innovated the "sentinel chicken" monitoring system that has become a prime component of arbovirus surveillance worldwide.

Reeves was active in all the relevant professional organizations, governmental and nongovernmental. He received many prestigious awards, among them the UC Berkeley Distinguished Teaching Award, the Berkeley Citation, the John Snow Award from the American Public Health Association, a U.S. Army Medal for Distinguished Civilian Service, and the Walter Reed Medal from the American Society of Tropical Medicine and Hygiene.

He was an outstanding teacher both in the classroom and as an advisor of students engaged in doctoral research. Bill was a tough taskmaster, concerned with the smallest details, but stimulating and sensitive. He chose his doctoral students carefully and many now hold important positions in academia and governmental agencies around the world. He served on Berkeley's Graduate Council and as dean of the School of Public Health from 1967 until 1972.

With the appearance of West Nile Virus encephalitis in 1999, Reeves resumed an active role in planning research and control strategies for the disease, even though he had retired in 1987. He served as a member of the California West Nile Virus Steering Committee and as a participant in the CDC's weekly "conference call" to concerned agencies regarding the status and planning for the control of the epidemic. One of the regular participants in the weekly conference call remarked: "... The groundbreaking research that Bill and his colleagues did on the SLE virus – a close cousin to West Nile virus – gave us a roadmap for understanding West Nile virus, helping us to predict how it would behave in North America...".

When Bill Reeves was 12 years old he had a job delivering the Saturday Evening Post. One of his customers, a Mr. Moulton, resisted paying for the magazine, necessitating collection from his wife or daughter. That daughter, Mary Jane, later became Mrs. William C. Reeves. They had three sons; William C., Robert, and Terry.

Bill took great pride in his special California automobile license plate number: "Culex T"!

Arthur L. Reingold  
S. Leonard Syme  
Warren Winkelstein Jr.