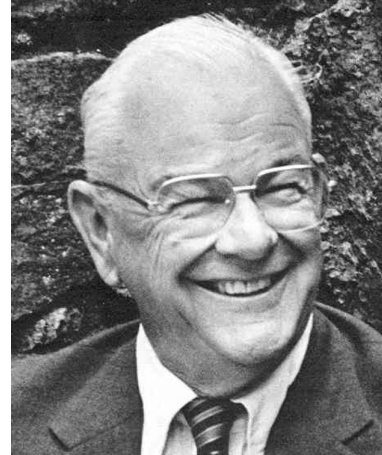


Obituary

In Memoriam

William C. Reeves (1916–2004)

We have lost one of the great epidemiologists, entomologists, and teachers of our time. William C. Reeves, Professor of Epidemiology and Dean Emeritus of the School of Public Health, University of California, Berkeley, died on September 19, 2004, after a brief illness. For those of us fortunate to have been inspired, educated and amused by Bill Reeves, he is irreplaceable.



Born in Riverside, California, on December 2, 1916, Bill Reeves attended secondary schools there and then the University of California at Berkeley, where he earned degrees in Entomology (B.S., 1938) and Medical Entomology and Parasitology (Ph.D., 1943). After his undergraduate years, Bill worked as a forest entomologist for the U.S. Department of Agriculture, and during World War II he worked as a civilian advisor to the military, investigating mosquito-borne viruses in the U.S. and, overseas and following the war, continued to consult for the military regarding viral diseases and medical entomology. He returned to the University of California, Berkeley as a teaching assistant in the Department of Entomology and worked as a research associate at the Hooper Foundation at the University of California, San Francisco. In 1949, Bill earned a degree in Epidemiology (M.P.H.) and never left employment there again. Over the years he rose from lecturer to Professor to Dean of the School of Public Health. Even though he retired officially in 1987, Bill remained as Professor, arriving at his office by 7 am four days a week and continuing to teach classes, advise students, telephone former students and long-time associates, and serve on various committees advising various governmental entities and prodding us all to do better.

Bill Reeves was unique. His wide-ranging travels afforded him a remarkably insightful international perspective, and his work in both the field and the laboratory honed an equally broad scientific perspective. He was a patriot and a long-standing friend of the military, serving for many years as a member of the U.S. Armed Forces Epidemiological Board and as an expert consultant to the Surgeon General of the Army. Bill also was a consultant to the director of the U.S. Centers for Disease Control and Prevention (CDC) and consultant to various programs within the CDC. He was a member of the Viral Diseases Study Section of the U.S. Public Health Service, chaired a U.S. National Institutes of Health committee on reagent production and led, or was a member of, various other state, national and international committees, helping to establish plans to implement new programs or to revise outmoded ones. The list of his advisory committees is very long and impressive and his roles in these programs provided Bill with a penetrating international perspective of public health; or was it the other

way around? Was it the intellect and insight of Bill Reeves that dragged the rest of us in the direction we should have been going all along? Was Bill Reeves the result, the guiding light, or the cause of change? We believe it was the last.

When Bill was in a room with other experts, he seemed to get his point across effortlessly. Most often he would make a small joke to take the edge off a question, perhaps even chide a little (or more than a little), but he never wavered from the point in question. He paid attention to details and listened to speakers, both the inexperienced and the well established, distilling the essence of their messages. One of us once asked Bill to serve as summarizer of a 3-day symposium and he responded, "Why me? Anyone can do it. You could do it. But you are too lazy to pay attention." He then accepted the task and did a marvelous job: the summary was complete, detailed, and insightful, and ended with Bill's own suggestions about the work that was still needed. In fact, no one else could have done what he did in the way he did it. This skill was uniquely Bill's and it was recognized by local, state, national, and international organizations throughout the world.

In 1941, Dr. Reeves and Dr. William McD. Hammon isolated both Western equine encephalitis virus and St. Louis encephalitis virus from *Culex tarsalis* mosquitoes (Bill's automobile license plate read "CULEX T"), proving that these pathogens were transmitted by insects. Soon thereafter they isolated California encephalitis virus from *Aedes melanimon* mosquitoes. These historic accomplishments established a foundation for decades of discoveries about virus-vector interactions and provided the grist for generations of doctoral dissertations, many of which were conducted at Bill's famed Bakersfield field station, and ultimately led to more focused efforts at control of these diseases and others by targeting the vectors. This approach of targeted vector reduction has since been used to control many arboviruses, and Bill's understanding of these fundamentals put him much in demand by local and national administrators of arbovirus disease control programs. Among many other practical advances that facilitated the study of arboviruses and their vectors, Bill developed methods to mark mosquitoes with fluorescent dyes, which allowed accurate estimates of flight range and survival of mosquitoes; he pioneered the use of chickens as sentinel indicators of virus transmission; and he developed and perfected various traps for collecting mosquitoes.

As a medical entomologist, Reeves was valued greatly for his opinions, and it was remarkable to see the influence he had in medical matters in a field dominated by physicians. He was almost invariably correct in his predictions and in his specific suggestions for additional studies. When West Nile virus was discovered in the New York City area in 1999, Bill jumped at the opportunity to help, providing ideas regarding surveillance, control, and research. "Bill participated regularly in conference calls that CDC held with state health departments during the West Nile virus transmission season", said Bill's former student Roy Campbell of the CDC, and he asked pointed and germane questions, all useful for current and future research efforts. Other former students and associates, those who knew him best, had equally strong impressions of Bill:

. . . he will forever stand tall in the minds of his disciples, those he personally trained and those he merely influenced. – Hazel G. Wallace

Bill Reeves was dedicated to training and his teaching continues to play in my mind. He helped establish the standards for mosquito research, including scientific integrity and openness. – Laura Kramer

He created an environment in which it was impossible to not learn. . . I will miss his intellect and incisive way, his generosity and friendship. . . – D. Bruce Francy

I could always count on Bill for his incisive comments and advice on how to improve the statewide surveillance system and mosquito control program. – Vicki Kramer

Bill developed himself into an extraordinarily skilled scientific writer. . . and worked very hard to help his graduate students develop this invaluable style. – Grant L. (Roy) Campbell

Bill was the most important single individual who shaped my career in arbovirology. Not a week went by when I was Director at CDC, Ft. Collins that we did not have some contact, often a brief phone call to stay abreast of developments, arbovirus outbreaks or the latest research results at Ft. Collins or Bakersfield, or just to have a chat. His wisdom was refreshing, and I came to rely on Bill in difficult times to confirm that the direction we were taking at CDC was on target or to help reset the course. Bill had a wonderful sense of humor, and from the beginning of our relationship, we would poke fun at each other and the world. He also had infinite patience and was the consummate Professor. One summer, at his beloved Ginger Quill Ranch, Bill had enough of me deriding his tall tales of trout fishing and challenged me to learn how to fish. We spent the next three days on the Poudre River, Bill coaching me on wet fly fishing. I never landed a trophy trout, but I came to appreciate why he was so revered by his students at Berkeley. – Thomas Monath

While driving from the airport where he was to lecture to my tropical medicine students Bill seemed preoccupied. To my astonishment he said, “Barney, when you stop getting butterflies in your stomach before a lecture it is time to quit teaching”. – Barnett Cline

There was more to Bill’s life than science and teaching. Bill was an avid fisherman who loved the outdoors. This was never more obvious than when he and his “Nutty Buddies”, Karl Johnson and Wilbur Downs, gathered to swap stories.

In 1940 Bill married Mary Jane Moulton, whom he had known since his childhood, when he delivered newspapers to her family’s home in Riverside. They had three sons and had been married 64 years when he died. Bill Reeves did not have a short attention span.

Charles H. Calisher
Colorado State University
Fort Collins, Colorado, USA

James W. Le Duc
U.S. Centers for Disease Control and Prevention
Atlanta, Georgia, USA