

Dr. Robert H. Miller

1934–2017



With great sadness, the Animal Genomics and Improvement Laboratory (AGIL) announces the passing of Dr. Robert H. “Bob” Miller on Sunday, May 28, 2017. He was born on June 8, 1934, son of the late Henry Eugene Miller and Margaret West Miller. Robert and his loving wife, Vivian Johansson Miller, were members of First Presbyterian Church of Howard County, MD. He was a former Deacon, Elder, and church treasurer at the Church of the Pilgrims, Washington, DC. After retirement, he graciously gave his time as a volunteer with the Foreign Information and Referral Service in Columbia, MD, and pursued his many hobbies, including folk and bluegrass music, Greek art and history, and genealogy. As a loving husband, father, son, and brother, he is survived by his wife, son Kenneth Matthew Miller of Alexandria, VA, and sister Betty Miller Greenhill (Mooresville, NC). He was preceded in death by his parents and 2 brothers, Kenneth West Miller and James Eugene Miller.

Bob was a graduate of North Carolina State University (BS, agriculture, 1956; PhD, dairy cattle genetics, 1962) and Michigan State University (MS, dairy science, 1958). He began his career with USDA’s Agriculture Research Service (ARS) in 1960 as a dairy husbandman in Beltsville, MD. He also served as a biometrician and research geneticist before being appointed chief of the Genetics and Management Laboratory in Beltsville in 1972. In 1979, after ARS reorganization, Miller became the research leader of the Milk Secretion and Mastitis Laboratory and remained in that position for 23 years until his retirement.

Early in Bob’s ARS career, he devised a new genetic experimental design for estimation of nonadditive genetic variation in animals. He also conducted extensive research on methods to increase the accuracy of genetic evaluations of dairy bulls and developed the formulation and implementation for the first national dairy cow evaluations. He conducted a series of studies to quantify milk yield impact from increased milk somatic cell count and bacterial infection as well as a series of studies to determine whether mastitis defense mechanisms were inherited.

More than anyone else, Bob was responsible for initiating the dairy genomic research at Beltsville. He led a team that found several genetic markers that were associated with mastitis resistance. His research on mastitis also included an investigation of the effect of intramammary devices on milk yield and a quantification of the role of teat canal keratin in mastitis defense. His later research focused on trends in death losses and abortion frequency of dairy cows.

Bob’s sustained research productivity is documented in 131 peer-reviewed scientific articles, 20 conference-proceedings papers, 19 Federal Government technical reports, and 142 scientific abstracts. In June 2017, he was inducted into ADSA’s inaugural JDS 100 Club for authorship of more than 100 peer-reviewed articles in the *Journal of Dairy Science*.

Bob was a member of ADSA, the American Association for the Advancement of Science, and the American Genetic Association and served on the Research Committee of the National Mastitis Council. He was consulted by animal scientists worldwide for research planning, analysis, and data interpretation. He also fostered an active cooperative research program with the Department of Animal Science at the University of Maryland. After retiring from ARS in 1995, Miller continued to contribute to dairy science research as a volunteer at the Animal Improvement Programs Laboratory (now part of AGIL) in Beltsville, MD.

Bob’s memorial service was held at First Presbyterian Church of Howard County on June 18, 2017, at 2 pm. Contributions may be made in his name to www.savethechildren.org.