



Richard Louis Quaas

April 11, 1944 – October 19, 2021

Richard (Dick) Louis Quaas passed away Tuesday, October 19, 2021. Richard “Dick” Quaas was born on April 11, 1944 in Cedar Rapids, Iowa, and grew up on his family farm in Alburnett, Iowa. His interest in livestock was evident at an early age leading to his involvement in 4-H and FFA. Dick attended Iowa State University and earned a bachelor’s degree in Animal Science. After graduation, he entered the Peace Corp and spent time in Ecuador in South America. Upon his return to the United States, he attended Colorado State University where he earned M.S. and Ph.D. degrees in Animal Breeding. In 1973, Dick was appointed Assistant Professor in Animal Science at Cornell University. As a member of the Cornell faculty, he rose through the ranks to Professor of Animal Breeding in 1989. In 2010, upon his retirement, he was named Professor Emeritus of Animal Science, College of Agriculture and Life Sciences, Cornell University.

Professor Quaas’ career was devoted to Animal Breeding and Quantitative Genetics. His departmental program included statistics and the genetic improvement by selection of domestic populations, particularly cattle populations, and more specifically beef cattle. He

utilized phenotypic data collected on thousands of farms and ranches from all over North America for complicated statistical and computational analysis of these data resulting in a single number representing the genetic merit for a particular trait of each animal in a population that may number in the millions. The subsequent emergence and availability of molecular DNA techniques held the promise of making selection more efficient, e.g., commercial DNA tests for favorable alleles/markers for quantitative traits in beef cattle. As a member of the National Beef Cattle Evaluation Consortium (NBCEC) and quantitative trait loci team chair, his important research included validation and verification of associations between genetic tests and traits as claimed by a commercial genotyping company using phenotypes and commercial DNA tests from reference cattle populations. Analyzing such data proved to be a complicated statistical and computational challenge that appealed to Dr. Quaas.

Professor Quaas always said he was an animal breeding statistics guy and he became renowned and respected in his field. His acknowledged strength in animal breeding theory and computing strategy lead faculty colleagues to visualize him as the new young “Henderson” of the department. During his early years on the faculty, Dick was often seen sitting in his office, smoking his corn cob pipe, obviously in deep thought, presumably contemplating some complex equation or new way to tackle a computational problem. Dr. Mike Van Amburgh, Professor of Animal Science at Cornell, recalled that “Dick had extraordinary mathematical skills. He was able to solve very complex mathematical problems in his head, much to the amazement of his colleagues.”

Dr. Quaas traveled internationally, attending seminars, speaking engagements, and receiving awards. Several sabbatical and study leaves in Queensland and New South Wales Australia and later in Zurich Switzerland provided experience with different cattle populations and researcher viewpoints. As recognition of his research contributions, Dr. Quaas received honors and awards from professional organizations including: 1982 Young Scientist Award, Northeast Sections of American Society of Animal Science and

American Dairy Science Association; the prestigious J.L. Lush Award in Animal Breeding and Genetics, American Dairy Science Association; and the 2006 Rockefeller Prentice Memorial Award in Animal Breeding and Genetics, American Society of Animal Science. However, he was particularly pleased with awards from beef industry organizations representing constituents his research directly impacted. These awards included: Beef Improvement Federation's Pioneer Award and the World Simmental Federation's Golden Book Award.

Dr. Quaas' training and interest in animal breeding and quantitative genetics lead to teaching responsibilities exclusively in the graduate education program. For many years he taught ANSC 720, Advanced Quantitative Genetics, as the capstone course for students in Animal Breeding. His course, in addition to providing hands-on training in computer programming, helped perpetuate the department's preeminence in this traditional area attracting numerous national and international students. Dr. Jerry Taylor, Curator's Distinguished Professor Emeritus of Animal Science at the University of Missouri was a postdoctoral associate at Cornell and attended his class. "Dick was an amazing teacher and a brilliant statistician and geneticist. Very few people in the world of his caliber," Taylor said. "He was also a wonderful mentor and colleague. He was at Cornell at a time when the animal science genetics group was considered the mecca for quantitative genetics. As unassuming as he was, Dick was a big part of that reputation."

Dr. Quaas assumed responsibility as Director of Graduate Studies in the Field of Animal Science from 1981-2009. This position served the entire department for selection of graduate students and Dr. Quaas was noted for maintaining a high level of standards and for remaining true to the mission of Animal Science. Dr. Quaas also contributed to the undergraduate program in Animal Science as an academic advisor for 14-17 students each year throughout his career.

He is survived by his brother Max (Linda) Quaas of Decorah and sister Mary (Tommy) Moore of Alburnett, two nephews, Josh (Claudia) Quaas and Justin (Pasha) Quaas, and two nieces, Jennifer

(Jason) Johnson and Jill (Terry) Logston. Dick was affectionately known as “FUD”, Favorite Uncle Dick.

Written by W. Ron Butler (chair), E. John Pollak, and Thomas Overton