

2021 MARVIN AND ARLENE LARGE
PIONEER AWARD

Presented to

George E. Seidel



PHOTO BY TROY SMITH FOR ANGUS MEDIA

The 2021 Marvin and Arlene Large “Pioneer Award” is presented posthumously by the Beef Reproduction Leadership Team to George E. Seidel, Ph.D. in recognition of his contributions towards the development and refinement of reproductive technologies now used extensively in the beef industry. Dr. Seidel was raised on a Pennsylvania dairy farm and earned a bachelor’s degree at Penn State University in dairy science in 1965 and master’s and doctoral degrees from Cornell University in 1968 and 1970, respectively, focusing on reproductive physiology in cattle. Following a post-doc at Harvard medical school, he took a position at Colorado State University where he spent the remainder of his career.

He was a pioneer in the development of methods for embryo transfer and played a key role in the establishment of the Bovine Embryo Transfer Laboratory at Colorado State University. That laboratory conducted much of the early research on superovulation, nonsurgical embryo transfer, and embryo cryopreservation. These techniques and technologies went on to have a transformative impact on both the dairy and beef cattle industries. Although rightfully proud of the improvements in reproductive management and genetic progress that stemmed from this work, Dr. Seidel carried himself with humility and kindness throughout his career and was well-loved and respected by fellow academics, industry partners, and producers alike.

Dr. Seidel later became known for his role in developing methods for sorting sperm cells based on X or Y chromosome content, as well as his leadership in applied research efforts to evaluating the use of sex-sorted semen in animal agriculture. That line of research resulted in many patents and the establishment of a company called XY Inc. The royalties from that work, which George could have claimed for his personal benefit, were generously given back to Colorado State University, and have supported many students and researchers over the years.

In 1992, Dr. Seidel received the honor of being elected to the prestigious National Academy of Sciences, where he served in the Animal, Nutritional, and Microbial Sciences section. George also received the Distinguished Service Award (2001) and the Pioneer Award (2008) from the International Embryo Transfer Society, a society that he helped establish nearly 50 years ago. In 2014, he was elected to the National Academy of Inventors. In 2020 he was recognized with the L.E. Casida Award for graduate education by the American Society for Animal Science. Truly, few scientists’ careers have yielded such a breadth and depth of accomplishments in both foundational and translational research.

In recognition of a visionary career full of pioneering accomplishments, the Beef Reproduction Task Force is pleased to recognize Dr. George E. Seidel with the 2021 Marvin and Arlene Large “Pioneer Award.”