



## 2019 MARVIN AND ARLENE LARGE PIONEER AWARD

Presented to

**JAMES W. LAUDERDALE, Ph.D.**

The 2019 Marvin and Arlene Large “Pioneer Award” is presented by the Beef Reproduction Leadership Team to James W. Lauderdale, Ph.D., in recognition of his outstanding contributions to the advancement of reproductive technologies in livestock and ongoing commitment to reproductive management in support of the U.S. beef cattle industry. Dr. Lauderdale earned a bachelor’s degree in Animal Science from Auburn University (1962) and master’s (1964) and doctoral degrees (1968) in endocrinology and reproductive physiology from the University of Wisconsin, Madison, under the direction of Dr. L. E. Casida.

Dr. Lauderdale was employed in 1967 by The Upjohn Company as a research scientist and was later named as the company’s Director of Research in Growth and Reproduction. Lauderdale’s research career with Upjohn focused on improving the efficiency of postpartum cow and sow reproduction; the role of prostaglandin  $F_{2\alpha}$  in regression of the corpus luteum for control of estrous cycles in cattle and mares, and time of parturition in swine; the use of steroids for improved efficiency of production in beef cattle; and development of bovine somatotropin to enhance efficiency of milk production of dairy cows. Lauderdale’s research related to chemical signaling in livestock provided producers with the opportunity to better control estrus and improve production efficiency, which subsequently led to the worldwide approval of prostaglandin  $F_{2\alpha}$  (Lutalyse® sterile solution) for use in cattle, mares, and swine. Lauderdale is credited with publishing a number of seminal papers in the Journal of Animal Science that contributed to improved methods of estrous cycle control and reproductive management in livestock, including “Fertility of Cattle Following  $PGF_{2\alpha}$  Injection” and “Distribution and Biological Effects of Prostaglandins”.

Dr. Lauderdale was recognized by the American Society of Animal Science (ASAS) in 1986 as recipient of the Animal Physiology and Endocrinology Award, by The Upjohn Company for Achievement in Science and Medicine (1988), by the American Dairy Science Association for outstanding service to the dairy industry (2000), and by ASAS with the Retiree Service Award (2008). He served as President of ASAS (2002-2003) and the Federation of Animal Science Societies (2005). He was an active member of the USDA Agriculture Biotechnology Research Advisor Committee (ABRAC; 1992-1996). Dr. Lauderdale continues to be committed to animal agriculture. His research career has been a team effort based on hypothesis testing requiring specificity of question(s), experimental design consistent with the hypothesis to be tested, execution of the study consistent with study design, decision criteria established prior to data analyses/interpretation, appropriate statistical analyses of the data, data interpretation consistent

with study design, conclusions consistent with the data and the scientific literature; having followed this, identify and complete the next logical study(s).

Dr. Lauderdale has served in an Ad Hoc advisory role with the Beef Reproduction Task Force and Beef Reproduction Leadership Team since their inception in 2002, and 2004, respectively. Jim's enthusiastic support of the Applied Reproductive Strategies in Beef Cattle ("ARSBC") symposia and invaluable contributions to our Task Force and Leadership Team are recognized across the U.S. Dr. Lauderdale's leadership, mentorship, and support in transferring use of reproductive technologies to our nation's industry is recognized as the 2019 recipient of the Marvin and Arlene Large Beef Reproduction Leadership Team "Pioneer Award". In addition, Jim's legacy of commitment to research, education, and transfer of technology to the industry will be formally acknowledged through recognition of graduate students selected to participate in this year's symposia and future conferences as the "ARSBC James W. Lauderdale Scholars".