2023 MARVIN and ARLENE LARGE
PIONEER AWARD
Presented to
David J. Patterson, Ph.D.

David J. Patterson was raised on a diversified farming and ranching operation in south central Montana. Patterson completed B.S. and M.S. degrees at Montana State University, with research for his M.S. degree conducted at the USDA Livestock and Range Research Laboratory in Miles City, MT. Patterson received his Ph.D. in Reproductive Physiology from Kansas State University and joined the Division of Animal Sciences at the University of Missouri in 1996 after serving as State Extension Beef Specialist in Reproductive Physiology at the University of Kentucky. Patterson received funding over the past 23 years from the National Institute of Food and Agriculture's (NIFA) Competitive Grants Program to support his research and extension efforts and was the first recipient of an integrated award in Animal Reproduction from NIFA. Recent funding Patterson received from NIFA supports creation of a National Center for Applied Reproduction and Genomics in Beef Cattle (NCARG) at MU. Patterson's record of accomplishment includes over 500 refereed journal articles, scientific abstracts, proceedings papers and presentations at state, regional, national, and international meetings. Dr. Patterson's research efforts gained wide industry acceptance over the course of his career, resulting in new strategies to synchronize estrus and ovulation in postpartum beef cows and replacement beef heifers.

Dr. Patterson led development of the Missouri Show-Me-Select® Replacement Heifer Program, drawing on the fundamentals upon which Extension and the Land Grant System were founded: "The use and application of what we know to create knowledge". The Show-Me-Select® program enables participants to make practical production, management, and marketing decisions based on economics. The program has had a significant impact on Missouri's economy, acknowledged by Patterson receiving the University of Missouri President's Award for Economic Development, and being named as one of "50 Missourians You Should Know", by Ingram's Kansas City Business Magazine. The Show-Me-Select® program created an on-going educational conduit for beef producers in Missouri focused on reproductive management and genetic improvement of their herds, and is the first statewide, on-farm beef heifer development and marketing program in the U.S. Patterson was recognized as "Man of the Year in Missouri Agriculture" in 2001 for development and implementation of the Show-Me-Select® program, and in 2021 was the inaugural recipient of the Missouri Livestock Symposium Achievement Award recognizing his career achievements in support of Missouri's livestock industry. The Show-Me-Select® Program was named as one of seven "Programs of Distinction" in MU's College of Agriculture, Food, and Natural Resources in 2019.

Over the course of his career at MU, Dr. Patterson maintained an active graduate student-training program, and in collaboration with the University of Missouri College of Veterinary Medicine, Patterson developed a dual DVM-MS program to expand training in the area of beef cattle reproduction for veterinary students entering a food animal practice. Students enrolled in the dual DVM-graduate program gain extensive experience in a wide array of reproductive technologies and develop a working understanding of the scientific method and its' importance in conducting meaningful research.

Together with Dr. Mike Smith, Dr. Patterson initiated the F.B. Miller/Select Sires, Inc., Internship in Reproductive Management in 1997 at MU. The internship provides junior and senior level undergraduate students, graduate and veterinary students with practical training in development and execution of estrous synchronization and artificial insemination programs. Since its' inception, students have had the opportunity to be involved with estrous synchronization and AI programs involving over 300,000 heifers and cows in 12 states. Participation in the

internship led to successful placements of former interns into impactful leadership positions within the commercial AI and pharmaceutical industries, academia, veterinary medicine, and production agriculture.

Dr. Patterson is a past recipient of the Continuing Service Award presented by the Beef Improvement Federation; the Frederick Blackmar Mumford Outstanding Faculty Member Award presented by the MU College of Agriculture, Food, and Natural Resources; the Research Award presented by the National Association of Animal Breeders (NAAB); the MU C. Brice Ratchford Memorial Fellowship Award for commitment, dedication and effectiveness in advancing the land-grant mission; and the American Society of Animal Science Extension, Animal Industry Service, Animal Management, and Fellow Awards.

Patterson was a founding member and Chair of the Beef Reproduction Task Force, a group formed at the turn of the century providing scientific-based recommendations for the application of reproductive technologies to the U.S. beef cattle industry. This group, in partnership with the major AI organizations in the U.S., the pharmaceutical industry, and affiliated allied industries formed the Beef Reproduction Leadership Team. Collectively, the mission of this group is to optimize productivity and improve profitability of cow-calf operations by facilitating the adoption of cost effective, applied reproductive technologies, and educating beef producers on sustainable reproductive management systems that help to maintain U.S. leadership and competitiveness in the world beef market. Dave's vision and dedication to this integrated effort has had a profound impact on the U.S. beef cattle industry.

Dr. Patterson benefited greatly over the years from mentorship he received from a number of individuals, including: Drs. Robert Bellows, Peter Burfening, Don Kress, Robert Short, Robert Staigmiller, Keith Inskeep, Larry Corah, Guy Kiracofe, Mark Spire, Jim Lauderdale, and John Chenault, in addition to Roy Wallace. Patterson's career accomplishments, however, were in large measure a function of the encouragement and support he received from his family, including his wife, Mary F. Palffy, and their two sons, Dolan and Ian.