

Abstract for Paper to be presented at WHFF 2023, Puy du Fou, France

November 21/22, 2023

Session 1 **The Holstein Cow can do Anything - the Economic Choice** at 09.30.

Title is **Holstein as the breed of choice**

As we look to the future, no other breed is better positioned than Holsteins. We have the largest population. Our breed is found all around the world. We have great breeders who are science based and who have shown great success in addressing whatever challenge has come along. Our overall rate of genetic progress is faster now than at any time in history. Having cows with good genetics is recognized by our breeders as the key to the success of an individual farm. Research, in the U.S., on ranking herds by genetic merit revealed that, over an eight-year period, the herds in the lowest twenty percentile exited the dairy business at a rate of almost twice that of the top genetic herds.

Our genetic improvement has resulted in improved efficiency, being beneficial to our environment, and the welfare of the cow. Large increases in production have been accompanied with improvements in fertility and livability; holding body size to a small change; improved feed efficiency; and a lower incidence rate of calving difficulty, mastitis, and other diseases. Our selection goals will continue to evolve as new information and more precise phenotypes are identified.

Keeping our enviable position, as Holsteins being the number one dairy breed in the world, will require a more complete understanding of the genetics of our cows. We won't simply be looking for those cows that are more profitable. We will explore their genetic architecture and discover how different cows use different ways to produce more profit. Variations in gene expression and the utilization of different genetic pathways will provide valuable insights into genetic diversity. The genetic solutions for meeting future needs of our global dairy industry are within our Holstein breed.