

ROBERT BLAKE RUSSELL (ViaGen USA)

Blake was raised in Oklahoma in a family deeply rooted in horse racing, working with both American Quarter Horses and Thoroughbreds in training. His passion for horse breeding runs through multiple generations and continues today through one of his daughters, a Doctor of Veterinary Medicine specializing in equine reproduction.

Blake earned a B.S. in Animal Science from Oklahoma State University and an MBA from Emory University. After graduation, he spent nearly two decades in the commercial swine genetics industry, helping establish operations in over a dozen countries and managing P&L for the largest operations in North America and Asia. This work gave him early exposure to cutting-edge developments in mammalian genetics and reproductive technologies.

Inspired by the breakthrough cloning of Dolly the sheep at Roslin Institute, Blake joined the leadership team that licensed Roslin's SCNT patent portfolio. Over the past 20 years, he has dedicated himself to successfully commercializing this technology in horses, companion animals, and wildlife conservation.

Today, as owner and CEO of ViaGen Pets and Equine, Blake leads the world's premier provider of animal cloning technology. He has also built a thriving equine ICSI program that holds the exclusive North American license with Sexing Technologies to sort equine semen by gender for ICSI use. ViaGen Equine's Texas laboratory is home to the world's only ST sorter dedicated exclusively to equine ICSI.

Under Blake's leadership, ViaGen has become a globally recognized leader in SCNT, mammalian embryology, and the development of advanced technologies serving the equine breeding and performance community.

How Will Technology Shape the Future of Horse Breeding?

Horse breeding, once considered a purely intuitive and "artful" process, is now increasingly shaped by science and technology. Artificial insemination allows us to maximize the genetic influence of stallions as never before. Intra-cytoplasmic sperm injection (ICSI) offers new opportunities to leverage valuable mares. Advances such as sperm sex-sorting enable breeders to influence the gender outcome of foals. Together, these tools accelerate the impact of emerging innovations like gene editing and artificial intelligence.

The potential benefits of these technologies are exciting, but they also raise important questions. How do we manage this influx of new tools responsibly? How do we ensure that their use serves the best interests of the horse, maintains fairness in competition, and safeguards the integrity of our sport? What technologies are already part of the everyday breeder's toolkit, which are on the horizon, and how should their adoption be guided or regulated?

Blake's presentation explores the opportunities and challenges presented by today's—and tomorrow's—breeding technologies, asking how we can harness innovation to improve horse welfare and advance our breeding objectives, while avoiding unintended consequences and protecting the future of our industry.