Foundation supporting pertinent studies by up-and-coming researchers

In support of exceptional science being conducted by promising young researchers, the Foundation is providing \$99,051 for five equine research projects being investigated by AAEP-member graduate students and residents.

"These projects offer exciting possibilities for the health and welfare of horses," said Dr. Anthony Blikslager, chairman of the AAEP Foundation Advisory Council Research Subcommittee. "Collectively, they have the potential to yield new treatments for problematic conditions, expand access to novel therapies, increase racehorse safety and enable breeders to raise healthier horses."

The supported projects with recipient photos and brief descriptions of research goals, are:



Equine platelet-derived peptides as novel disease-modifying osteoarthritis drugs

Dr. Jessica Gilbertie, North Carolina State University Finding the key components of a specialized formulation of PRP that are anti-inflammatory and increase high-quality hyaluronic acid production will lead to an off-the-shelf osteoarthritis therapy that eliminates the variability of traditional PRP.

Identification and validation of alleles responsible for cardiac arrhythmias and atrial fibrillation

Dr. Sian Durward-Akhurst, University of Minnesota

Developing genetic tests for cardiac arrhythmias, particularly atrial fibrillation, will allow for increased monitoring of genetically at-risk horses, retirement from racing before the onset of potentially fatal arrythmias and decreased incidence of arrythmias in breeding animals.





Understanding the role of MHCI compatibility in equine allogenic mesenchymal stem cells

Dr. Aileen Rowland, Texas A&M University

Understanding the effect of differing major histocompatibility complex haplotypes is critical in identifying an acceptable allogeneic MSC donor. Identification of a universal allogeneic MSC would make stem cell therapy more obtainable via federal approval, client expense and ease of use.



Investigating equine endometrial signaling pathways using an organoid culture system

Dr. Riley Thompson, Smithsonian Institution

Developing equine endometrial organoids will allow researchers to evaluate new treatment options for uterine diseases, reduce the use of live animals for research, lead to significant economic savings and improve animal welfare.

Validation of an antemortem diagnostic test for equine neuroaxonal dystrophy (eNAD)

Dr. Callum Donnelly, University of California-Davis

Examining genetic variants (mutations) involved with the enzymes responsible for vitamin E metabolism will influence the development of tests to aid in the diagnosis of horses with eNAD and provide tools for genetic screening in order to prevent future cases.



If you would like to support the Foundation's equine research efforts, please make a gift online at aaepfoundation.org..