

**Equine Research Committee
2018 Convention
Jacksonville, Florida**

Mister President, the Equine Research Committee makes the following recommendations:

1. To approve the following proposals, as amended, for funding in the amount of \$251,399.46:

“Clinical and Biochemical Effects of Intra-Articular Autologous Conditioned Serum and Triamcinolone in an Equine Model of Synovitis” at Auburn University in the amount of \$12,415.46

Young Investigator Award: Ana Velloso Alvarez

Autologous conditioned serum (ACS) is a cell-free product derived from the patient’s own blood, incubated, and processed to contain important anti-inflammatory proteins. Currently, there are no studies that objectively compare the treatment effects of corticosteroid administration to ACS in a large animal model of synovitis. The purpose of this study is to evaluate the effects of ACS for treatment of synovitis to a corticosteroid.

“Pharmacodynamics and Pharmacokinetics of Ethylphenidate in Horses” at the Racing Medication and Testing Consortium in the amount of \$25,203

Principal Investigator: Dr. Heather Knych

This project will be used to develop pharmacokinetic information about ethylphenidate and ensure that laboratories can detect sufficiently low concentrations to protect against the use of a small dose at bridle time. This information can be valuable in identifying suspect horses that may have been administered ethylphenidate in order to perform targeted drug testing.

“Effects of Aquatic Conditioning on Cartilage and Bone Metabolism in Young Horses” at Texas A&M University in the amount of \$72,534

Principal Investigator: Dr. Jessica Leatherwood

Little information exists relating to the effects of aquatic conditioning on bone and cartilage turnover of young horses. Implementation of aquatic programs in the horse industry should be investigated for the inadvertent yet potential damaging effects on developing equine cartilage and bone. The objective of the proposed study is to determine the influence of aquatic treading on biomarkers of cartilage synthesis and degradation as well as the effects on subchondral bone.

“The Effect of Horseshoe Length on Hoof Growth that Could Lead to the Underrun Heel Hoof Conformation Associated with Development of Injuries in Quarter Horses” at the University of California, Davis in the amount of \$19,968

Young Investigator Award: Vanessa Dahl

Underrun heel hoof conformation is associated with the incidence of injuries in both racehorses and performance horses. If we can understand the mechanisms that promote underrun heel hoof conformation, it is possible that changes in horseshoeing techniques can be made to prevent the development of poor hoof conformation and reduce the incidence of associated injuries.

“Platelet Lysate Modulates Systemic Inflammatory Responses in Horses” at the University of Georgia in the amount of \$44,171

Principal Investigator: Dr. John Peroni

It has been recently discovered that a product derived from the blood of horses has an impressive capacity to dampen the activation of the immune system. This product was originally manufactured in people and is termed platelet lysate. It has also shown that it has very promising features including acting as a powerful anti-inflammatory. In this proposal platelet lysate will be administered to a group of healthy horses in order to determine the appropriate dose and ensure that markers of inflammation obtained after lysate administration are decreased compared to those markers measured prior to lysate administration.

“Proteomic Profiles of Stallions with Superb and Poor Semen Cryopreservation” at the University of Illinois in the amount of \$7,973

Principal Investigator: Dr. Igor Canisso

Despite remarkable improvements in extenders and freezing methods, there are still many stallions that have sperm that does not survive cryopreservation well. This proposal is an approach to measure protein composition in the supernatant following the first semen dilution of stallions being collected for commercial semen freezing. The project is designed to help identify proteins associated with semen survival during cryopreservation, and will allow further investigation on the mechanism of cryoprotection and sperm function of seminal plasma proteins.

“Elucidation of the Mechanism of Suppression of Type-I IFN Response by Equine Herpesvirus-1” at the University of Kentucky in the amount \$19,962

Principal Investigator: Dr. Thomas Chambers

EHV-1 causes a worrying disease condition to many horse owners not only because of its tendency to impede reproduction but also because of its propensity to progress to a neurological form. Outbreaks are costly for the equine industry-quarantines and tracing efforts funded by the government to curtail the spread of the disease amount to millions of dollars annually in the United States. This research may contribute useful information needed for the development of potent immunotherapeutics against EHV-1 infection.

“Simplified Genetic Tests for Equine Embryos during a Standard Embryo Transfer” at University of Kentucky in the amount \$49,173

Principal Investigator: Dr. Alejandro Esteller-Vico

This approach will result in a simple genetic test for embryos using the spent media in which an embryo was incubated and stored prior to transfer to the recipient mare. If successful, this procedure will allow breeders to produce healthy foals free of genetic disease and maintain valuable genetic bloodlines without the risk of perpetuating genetic defects in the population.

2. To elect Dr. Bob Coleman as Chair.

On behalf of the Equine Research Committee, I move that the Membership support these recommendations and recommend approval to the Board of Directors.

Dr. Bob Coleman, Chair

PENDING APPROVAL
EC
APRIL 2018