



## **AAEP Thoroughbred Safety & Injury Prevention Forum Innovation Opportunity: Proposal Request**

The American Association of Equine Practitioners (AAEP) is dedicated to the health, safety, and welfare of the horse. In that regard, the AAEP wants to assist the Thoroughbred industry in developing technology to help make racing as safe as possible. The AAEP is willing to contribute monetarily to efforts to achieve this goal and, as a result, is hereby seeking proposals from applicants for a joint project that will involve the development and application of wearable biometric sensor technologies to improve early detection of musculoskeletal injuries in Thoroughbred racehorses. Depending on the nature of the response to this proposal request, the AAEP may also solicit funding from industry leaders.

Wearable biometric sensors have shown promise in the identification of sub-clinically affected racehorses or those at increased risk of musculoskeletal injury. The goal of this project is to develop a system that can be widely used throughout Thoroughbred racing in the United States.

The AAEP is seeking proposals for a system that monitors musculoskeletal parameters related to gait. The system needs to have data transmission capabilities that interface with algorithms designed to detect injury; be scalable enough for widespread use; and be user friendly and economical so that it can be employed on all Thoroughbred racehorses for all races and recorded workouts.

In addition, the system must be easy to use and small enough to be well accepted under field conditions. It must be able to generate sufficient usable data to inform and assist the trainer, veterinarian, and regulatory personnel with decision making in the moment or with a minimum of data processing. Generated data must be reported in a format that enables secure cloud storage; able to be anonymized if necessary for subsequent large-scale analysis; and accessible via gated channels for trainers, veterinarians, and regulatory personnel under appropriate conditions as well as adaptable when horses transfer to a different location or ownership.

It is anticipated that proposals will include a proof-of-principle phase that will create the groundwork for wide-scale use. In addition to AAEP support, other industry funding will be sought, with the ultimate goal of facilitating the development of a system that is economical and simple enough for the monitoring of all horses racing and in training on a continual basis. At the completion of the proof- of-principle phase, the successful qualifying applicant(s) will be identified to supply the industry with this technology.

The goal is to apply the wearable technology to all of the over 50,000 horses currently actively competing or undergoing recorded workouts in the United States.

The AAEP will work with the successful applicant(s) on funding, licensing agreements, commercialization efforts, and other legal issues, with a goal of implementation into practical and effective use in the near future.

Interested applicants should direct all questions and/or a response to this Proposal Request to the following:

Dr. Sara Langsam, Chair, AAEP Racing Committee  
[langsam@tfbequine.com](mailto:langsam@tfbequine.com)  
(954) 732-2001

Pre-proposals due February 15, 2024, and should be limited to no more than three pages and include justification, objectives, brief methods, and expected results.