

## **FOR IMMEDIATE RELEASE**

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### **Research Study to Document Effects of Horses on Humans**

**\$50,000 Grant from the Horses and Humans Foundation Enables St. Louis University Team to Study Effects, Benefits of Hippotherapy**

"Aetna considers the use of hippotherapy for the treatment of cerebral palsy or other motor dysfunction experimental and investigational because there is insufficient scientific data in the peer reviewed medical literature..." The preceding quote, part of an insurance company's policy against the application of hippotherapy as a reimbursable therapeutic treatment, strikes at the heart of many EAA professionals.

The Horses and Humans Foundation (HHF), founded in 2004, aims to uncover needed scientific data that proves the efficacy of equine assisted activities/therapies, along the way facilitating universal understanding and appreciation of the significant influence of horses on humans. HHF recently announced a \$50,000 grant to a research team led by Jack R. Engsborg, Ph.D., of St. Louis University and Timothy L. Shurtleff, OTD/C. The winning project was one of nearly thirty high level research proposals submitted to the foundation from seventeen states, twenty-one universities and three countries.

"It was a great privilege for NARHA to support the announcement of the first Horses and Humans Foundation grant award at our national conference," says Paul Spiers, president of the North American Riding for the Handicapped Association (NARHA). "This Foundation is addressing the critical need for carefully designed, high quality scientific investigations into the benefits of equine assisted therapies."

"This project will create important new technology to measure the clear benefits of hippotherapy for children with mobility disabilities," says Spiers. The purpose of the funded project is to determine if hippotherapy can improve head/trunk stability and upper extremity gross movement control in patients with spastic diplegia cerebral palsy. The team has already completed pilot testing and received IRB approval and will soon begin the main portion of the study.

"We hope to demonstrate that hippotherapy makes real changes in the ability of children with cerebral palsy to control their body movements and improve their lives by permitting them greater participation in the typical activities of childhood," says Engsborg, Co-Investigator.

Each subject in the study will undergo screening and a series of evaluations leading to an individualized therapy intervention. Once per week during the twelve week intervention, subjects will spend thirty minutes mounted on a moving horse.

Patients will ride facing forward, backward or side sit on the horse. Some will kneel or ride in a quadruped position. Other exercises may include weaving around cones in a serpentine pattern (to add lateral challenge), weaving up and down a side hill (to add vestibular challenge) and stops/starts and half-halts (to further challenge and develop trunk and head stability). Most will perform upper extremity and cognitive tasks and may play 'games' with therapeutic intent while riding.

"Therapeutic Horsemanship (Wentzville), Ride-on St. Louis, (Kimmswick), and Exceptional Equestrians of the Missouri Valley (Washington) are all excited about the study and are beginning to actively recruit subjects which meet our inclusion criteria," says Shurtleff, Co-Investigator. Each is accredited by the North American Riding for the Handicapped Association, and treatment safety and efficacy will be ensured by following all applicable standards. Treatments will be conducted by state licensed and NARHA registered therapists with a certified instructor in the riding arena during each session.

Subjects will undergo three outcome assessment tests through video motion capture at the Gait Analysis Laboratory of St. Louis University. Head/trunk stability changes for each subject before, immediately after and twelve weeks after the intervention will be assessed. Upper extremity functional reaching ability will also be assessed. The team hypothesizes "improved trunk control should improve the functional use of the upper extremities because the improved stability of the proximal foundation of the upper extremities at the shoulder would enable improved distal control of the hands."

To complete the assessment, small reflective markers are placed over anatomical landmarks on the subject and multiple video cameras are used to simultaneously record the position of the markers as the subject sits on a motorized barrel. The method may provide better assessment indicating the benefits of hippotherapy than other methods of analysis, such as clinical rating scales, since video analysis is not dependent upon the skill or expectations of the testers.

"It is our belief that precise, direct, objective measurements of changes in movement, stability, and function resulting from HPOT...will add a level of precision and reliability to the growing body of evidence supporting HPOT treatment," Engsborg proposes. "We are grateful to the Horses and Humans Foundation for funding our grant and look forward with great enthusiasm to conducting it."

Horses and Humans Foundation grant awards are made possible by the generous contributions of foundations, individuals, businesses and therapeutic riding programs nationwide. A \$500,000 anonymous challenge grant is still matching every dollar contributed to the organization.

"It is our hope that Horses and Humans Foundation will continue to get strong public support needed to expand their grant program to secure the implementation of even more such projects," says Spiers.

It may not be long before insurance companies and others finally accept hippotherapy as a valid treatment, as the EAA community has hoped for so long.

The next round of HHF Grant applications will be due June 30, 2007. For more information on this project or opportunities for future funding, visit [horsesandhumans.org](http://horsesandhumans.org).

*HHF is dedicated to facilitating universal understanding and appreciation of the significant influence of horses on humans. The foundation promotes research that will directly benefit program participants and educate the public, including parents, donors, insurance companies, the medical community, etc., regarding the benefits of equine assisted activities. For more information contact KC Henry, Project Coordinator (440.543.8306 or [info@horsesandhumans.org](mailto:info@horsesandhumans.org)).*

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