

Horses and Humans Research Foundation

Traumatic Head Trauma/Brain Injury Focused Research Initiative

Mission: Through sustained investment in rigorous research, HHRF serves as a catalyst to advance global knowledge of horse-human interactions and their impact on health and wellness.

Amount Requested: \$125,000 – To fund research that will help establish best practices and increase capacity of effective alternative therapies to treat individuals who have experienced head trauma and traumatic brain injuries through equine assisted programs.

Horses and Humans Research Foundation – history

Horses and Humans Research Foundation (HHRF) was established in 2005 to fill the critical gap of research in the EAA/T field. The foundation has awarded \$xxxxxx in research grants and the findings have had an impressive rate of publication in recognized, peer reviewed, scientific journals. Although EAA/T programs are growing exponentially worldwide, and although medical professionals and participants widely acclaim impressive results, funders (insurance, Veterans Administrations, foundations, etc) too often withhold support from equine assisted activities and therapies (EAA/T) due to “insufficient evidence.” The only way to address this gap is through the support of robust research.

HHRF has 9, nationally based, board members and 23? members on their internationally based scientific advisory council. HHRF has funded eleven (EAA/T research projects in as many years. Ten projects have been completed, one is still active. Three of the awarded projects studied cerebral palsy/movement/balance, three studied post- traumatic stress disorder, three focused on autism, one researched children with bonding issues and one was on the horse’s response to people with physical/cognitive disorders.

HHRF-funded research is helping to establish long-needed evidence-informed practices and documented outcomes that will help these programs emerge into a professionally acknowledged and supported field. HHRF’s highly qualified scientific advisory council guides a stringent review process and selection of research that the foundation supports.

Why EAA/T?

Equine-assisted activities and therapies is a well-established, highly motivational, alternative therapy field that holds healing promise for a vast range of rehabilitation needs. The healing quality of horses has been understood by participants and observers for hundreds of years, but it was not until the last 30 years that the equestrian establishment, therapists and physicians have started to document the physical, psychosocial and educational impact of these programs.

Programs internationally are acclaimed for effective EAA/T services that efficiently and effectively provide motivational source of exercise, education and physical therapies, as well as a platform for leadership training, behavioral modification and psychotherapy. Clinicians say this is all achieved in a stimulating environment that provides challenge and motivation that consistently delivers desired outcomes and goals in a more efficient time frame.

Trauma Brain Injury Focused Research Initiative

HHRF board recognizes the urgent need for focused effort to address the significant challenge brain injuries:

Brain injury is not an event or an outcome. It is the start of a misdiagnosed, misunderstood, under-funded neurological disease. People who sustain brain injuries must have timely access to expert trauma care, specialized rehabilitation, lifelong disease management, and individualized services and supports in order to live healthy, independent, and satisfying lives.

Brain Injury Association of America

An estimated 2.4 million children and adults in the U.S. sustain a traumatic brain injury (TBI) and another 795,000 individuals sustain an acquired brain injury (ABI) from non-traumatic causes each year. Currently more than 5.3 million children and adults in the U.S. live with a lifelong disability as a result of TBI and an estimated 1.1 million have a disability due to stroke.

(Statistics courtesy of the [Centers for Disease Control](#) and the [Stroke Fact Sheet](#) also through the Centers for Disease Control)

Over 320,000 troops suffered from TBI from 2010 to 2015, with approximately 8,000 of the incidents classified as “penetrating or severe.” Department of Defense’s 2015 evaluation of U.S. military casualty statistics⁸:

The HHRF board has committed to addressing research in head trauma and brain injury as a priority strategy. This initiative includes the identification of key areas of research that will most impact human health and wellness through EAA/T.

Implementation process:

1. A team of research scientists and industry professionals will meet to establish parameters of investigation priorities.
2. A call for research proposals will be established and announced.
3. HHRF’s Scientific Advisory Council will review research grant applications and make a recommendation to the board regarding proposal selection.
4. HHRF staff tracks progress of research projects and budgeted costs.
5. The funded research project will be completed over a 1.5 year period.
6. Research findings will be distributed within the industry through publication and outreach of HHRF contacts and collaborative industry partners.

Outcome and goals:

Short-Term Outcomes:

- Rigorous scientific EAA/T research addressing TBI rehabilitation will be completed
- Research will be published in peer reviewed medical journals
- Research results will also be disseminated through industry journals, media, resource partners, etc with a focus to reach EAA/T professionals, medical communities, support systems, veterans, constituents, stakeholders and potential supporters.

Long-Term Outcomes:

- Develop evidence-based EAA/T practices as it relates to TBI rehabilitation

- Distribute research results to businesses providing third party reimbursement to TBI rehabilitation programs (such as health insurance companies and nonprofit rehab service funders).
- Increase professional interest, capacity and involvement in EAA/T as it relates to TBI rehabilitation.
- Enhance general, financial, and community support toward programs providing TBI focused EAA/T programs.

How the efficiency, quality and effectiveness of the research program is evaluated:

An exceptionally involved and committed board of directors governs the work of the foundation and evaluates out comes and progress against strategic goals on a regular basis. The board heavily relies on the ongoing assistance of the highly qualified scientific advisory council. Each research project’s success is assessed by:

1. Number of qualified applicants managed by highest level research teams, applying to each grant cycle.
2. Tracking progress of grant recipient from start to finish.
3. Carefully scrutiny of conservative budget management
4. Ensuring persistent pursuit of publication in peer reviewed journal.
5. Tracking pervasive distribution of research results.
6. Tracking impact of research on industry through surveys, industry summits and feedback from EAA/T membership associations

Budget:

Sample Research Project Budget		
Personnel (investigator, co-investigators, statisticians, etc.)	\$ 45,000	
Consumable research related supplies	\$ 6,000	
Travel	\$ 2,000	
Consultant	\$ 7,000	
Client related expenses	\$ 9,000	
Equine expense	\$ 6,000	
Direct research		\$ 75,000
Head trauma research analysis and strategy planning	\$ 25,000	
Committee payment: Scientific review of proposals by committee	\$9,500	
Grant management	\$6,000	
Research support		\$ 50,000
Total initiative expense		\$125,000

List of all funding commitments to date: