Lyda Hill: Redefining Military Intelligence

Visionary philanthropist Lyda Hill infused $2 million into an innovative Brain Performance Institute (BPI) initiative aimed at empowering one of our greatest national assets – military service members.

After a conversation with her nephew, an Air Force F-16 pilot and Iraq war veteran, about the need for philanthropic support for military causes, Lyda set her sights on finding the answer to the question, "What are we doing to help military men and women thrive after their time of duty?" She realized too little, too late. Now, Lyda is on a mission to make sure our troops, both in and out of uniform, get to enjoy the quality of life they so courageously defend.

Although much effort is dedicated to repairing the physical wounds of war, very few programs in the sea of goodwill address the invisible injuries of the mind with meaningful, long-term life change. "The lack of attention to brain health is creating a preventable barrier to attaining future financial, social and emotional success," said Lyda. "Brain health is like physical health. You can actively pursue it. It's up to you."

Lyda's passion to ease the transition to civilian life for service members, her unparalleled community leadership, keen visionary insight and generous two-million-dollar gift has ignited the creation of mobile Warrior Training Teams that will deliver scientifically proven programs, developed at the Center for BrainHealth, to a wider audience. The goal of the Brain Performance Institute Warrior Training Teams is to arm veteran and active duty service members with the necessary tools to achieve successful, enriching and fulfilling lives by proactively optimizing brain performance, building resilience in cognitive brain function, and reversing losses in cognitive capacity. "It's a way to help bridge the gap from deployment to employment," Lyda explained.

Lyda's gift has been truly transformative for the Brain Performance Institute and has allowed us to immediately begin realizing our vision to provide high performance brain training to a larger group of warriors around the country," explained BPI executive director, Eric Bennett. "By capitalizing on the valuable leadership, decision-making, strategic thinking and problem-solving skills learned in the military, we will help warriors reach their brain potential and civilian life success."

With Lyda's donation, a Warrior Training Team has already been dispatched to assess a group of 38 select special operation forces before their deployment. Upon their return, these elite service members will complete Strategic Memory Advanced Reasoning Training (SMART), which has been scientifically proven to spur dramatic brain change after just hours of training.

"I am honored to be a part of the Warrior Training Team and to deliver a proven program, that profoundly affected my life, to my brothers and sisters in uniform," said Jake Fuller, former Navy SEAL and inaugural Warrior Training Team member. "When I came back from deployment in November 2012, my stress level never dropped. I was subconsciously trying to keep my stress level at what I had become accustomed to in Afghanistan. SMART gave me the ability to move forward in the civilian world because I now know I am the driver of my most important tool for life success - my brain. To be able to give that opportunity to other service members is a privilege."

When reflecting on those served by her magnanimous gift, Lyda said, "I am in awe of their willingness to protect our country for those they don't even know. I want to thank each of them and let them know that the private sector is here to help. My greatest hope is that all of our military can be reintegrated into civilian society and enjoy the life that they have defended for their families."
Dr. John Hart, Jr. Looks Under the Helmet

Great progress is being made in brain research at the Center for BrainHealth. New discoveries provide insight into how we can achieve improved brain health, whether our brains are healthy or damaged.

Developing solutions to achieve higher brain performance is a major research focus at the Center. It is also one of the reasons I became involved in this field. As a parent, I am extremely dedicated to its continued success. I believe that is the way of the future, something with that knowledge is what’s really important.

The transition into adulthood is hardly smooth, but autism poses communication challenges. The true question is, are you ready to take on the role of a friend? Is there a way to help move to the unknown? Seek new experiences to help move to the unknown. Seek new experiences to

Q & A with Dr. Hart

John Hart, Jr., M.D. heads the BrainHealth Institute for Athletics and is lead investigator on the brain imaging study of former NFL players to date. His team’s research aims to improve the ability to respond for athletes everywhere.

The Stat Sheet: 34 retired NFL players participated in the study.

- 42% had cognitive deficits
- 32% had memory deficits (failing word finding and visual/verbal episodic memory)
- 24% had mild cognitive impairment (MCI)
- 6% had dementia
- 24% had clinical depression

Dr. Hart and his team compiled detailed neuropsychologic assessments as well as neuroimaging data.

What should people take away from the study findings?
A. Three important take-aways. 1. It’s important to realize that not everyone who gets a concussion has problems. Some don’t. 2. The severity or number of concussions does not correlate to repercussions like depression. They need to be treated as individual cases. 3. There is a high correlation between depression and concussions.

How are deficits in retired athletes different from the normal aging population?
A. Typically we see some decline in memory with age. However, the former NFL players in the study are having more profound memory trouble than norm without a history of concussions. They are also experiencing lapses in word finding and difficulty with name recall. We suspect the centers in these regions for areas of cognition might be more susceptible to concussions.

Did the players exhibit typical signs of depression?
A. The players who were depressed were not showing typical symptoms. They didn’t know that they were depressed. Many of them had a lack of energy or a change in energy, an inability to concentrate, an inability to start or finish projects, and now, even contemplating suicide, but because they were not crying or feeling sad, they did not associate their problem with depression. Their depression manifested as a thinking disorder, not a mood disorder. It begs the question is concussion affects the brain is its own type of depression.

Each year, anywhere from 1.6 to 3.8 million athletes suffer a concussion, according to the Centers for Disease Control and Prevention. The long-term effects are unclear, but recent research from the Center for BrainHealth indicates brain changes caused by concussions may be putting aging former NFL players at higher risk of cognitive deficits and depression than the general population.

What can be done to prevent long-term consequences?
A. What this study does tell us is that it is important to monitor players at the highest level. Real-life to-play rules need to be outlined and enacted if a head injury is suspected. Physicians and trainers should be made aware of the symptoms training to help their players. If you know you have a head injury, it’s easy to treat. If you are having cognitive issues, the Center has developed strategies that can help.

What does this mean for the future?
A. What’s promising is that we were able to locate and document imaging markers that may account for why some patients develop depression, and we may be able to determine who might be at risk for this type of symptom later in life.

Q. Would you let your child play football?
A. I highly doubt it. He played soccer. The players we’re seeing now who are having problems played 30 or 40 years ago. The science isn’t out there saying that you need to rest your brain for head injury. They’d just get back into the game as soon as they were ready. That risks what we call “second impact syndrome” which is far more dangerous.

Q. What is second impact syndrome?
A. If you don’t let the brain rest and heal after a concussion and then a second concussion occurs, the brain disruption from the second concussion is greatly amplified. It increases your chances for long-term damage. Remember, in doubt, keep kids out. It’s just not worth risking a child’s future.

If you have a 17-year-old boy, and he plays lacrosse. The players each year, anywhere from 1.6 to 3.8 million athletes suffer a concussion, according to the Centers for Disease Control and Prevention. The long-term effects are unclear, but recent research from the Center for BrainHealth indicates brain changes caused by concussions may be putting aging former NFL players at higher risk of cognitive deficits and depression than the general population. What can be done to prevent long-term consequences? What does this mean for the future? Would you let your child play football? What is second impact syndrome?
Leadership Spotlight

Eric Bennett and Kimber Hartmann, two individuals who left successful careers in for-profit industries to follow their passion, are at the helm of the Brain Campaign, an $82 million capital fundraiser to construct the Brain Performance Institute, as well as fund five years of programming, expand research and build an endowment for the national headquarters. “With their leadership, 30 years of research will finally have the opportunity to directly impact the lives of the hundreds of thousands of people who want to make their brains smarter and healthier,” said Center for BrainHealth Founder and Chief Director, Dr. Sandi Chapman.

Eric Bennett and Kimber Hartmann

Chapman inspired former BrainHealth Advisory Board Member, Eric Bennett, to join the Brain Performance Institute as Executive Director. As co-founder of one of the most successful and largest wealth management firms in Texas, Eric’s previous leadership experience and the relationships that he developed during a 25-year career in financial services are the foundation for his keen strategic insight, management skills and ability to raise funds. “I get immense joy out of building things,” he explained. “The vision of the Brain Performance Institute is so tangible and powerful that it resonated with me. Building awareness about brain health and translating research into programs that work is creating transformative change. We are helping people realize that everyone can change their mind to create a healthier brain.”

Eric is charged with growing the Institute, making the cutting-edge programs developed at the Center scalable, and finding the financial backing to make that possible. He is centralized on the Brain Campaign, building partnerships and laying the strategic groundwork for expansion.

Kimber Hartmann joined the Center for BrainHealth one year ago as Development Director after a 20-year career as an attorney. In addition to practicing general corporate law, she chaired some of the most prominent fundraising events in Dallas including the Genesis Women’s Annual Mother’s Day luncheon and the Community Partners of Dallas’ Chick Lit luncheon. She also served as underwriting chair for Celebrating Women, benefiting Baylor Health Care Systems, and is a member of Crystal Charity Ball and Cattle Barons Ball, in addition to serving as Vice President of Development for the Junior League of Dallas.

“Of all the places I could invest my time, this could have the biggest impact on the community,” Kimber explained. “I love being part of a place that is relevant to all of us. The Center offers people hope and control over their destiny. Because here, it’s about what you can do to make yourself smarter.”

Kimber works with major donors and foundations on developing resources to advance innovative research. She advocated on behalf of the Center to gain UT Regents’ approval for the Brain Performance Institute and helped negotiate the subsequent land deal. Together, the duo has raised $9 million toward the Brain Campaign’s goal, including generous donations from Emy Lou and Jerry Baldridge, Lyda Hill, Bert Haedlen, The Perot Foundation, Lynda and Joel Robuck, Jane and Bud Smith, The Tollison Family Foundation and Dee Wyly.

Imagine a school where brain performance is optimized and students are excited about learning. They ask thoughtful questions and make meaningful connections to real world situations. Test scores rise and self-confidence and creativity increase. A $250,000 Communities Foundation of Texas grant to the Center for BrainHealth will make this a reality at Thomas A. Edison Middle Learning Center, a school in West Dallas that serves low socio-economic status (SES) Hispanic and African American students.

“This fall, Edison will become the first Dallas ISD school to integrate, campus-wide, the high performance brain training, know as SMART (Strategic Memory Advanced Reasoning Training), developed by the Center for BrainHealth. Nine core curriculum teachers have been intensively trained to teach a series of 10 SMART sessions, which encourage students to be innovative and use higher-level thinking skills. The remaining 70 teachers and school leadership will be taught skills to help incorporate the high performance brain training concepts into their existing curriculum. Once the initial professional development takes place, Center for BrainHealth will continue to provide additional in-classroom modeling and support for teachers, including lesson planning, curriculum extension and additional professional development.

To date, more than 15,000 students in four states have completed the SMART program, and more than 200 teachers have been trained to implement the program in their classrooms. Research has revealed that teens who have completed SMART boosted their grades and improved reasoning ability by as much as 50%.

“We have seen the SMART program transform classrooms across the country,” explained Jacque Gamino, Ph.D., director of BrainHealth’s Adolescent Reasoning Initiative. “Teachers who have implemented the program report a more energized, creative and thought-filled classroom, and parents have stated their children are more confident and excited to learn. By bringing the interactive and engaging SMART learning environment to an entire school, we will give every child at Edison greater opportunity to reach his or her academic potential.”

The Center for BrainHealth hopes to expand the SMART Community School Initiative even further, growing to multiple campuses and adding technology components.

Support the Center for BrainHealth’s life-improving research.

Research and programs highlighted in this newsletter were made possible through the generosity of:
The Boone Pickens Foundation, Crystal Charity Ball, Communities Foundation of Texas, Lyda Hill, Lattner Family Foundation, PlainsCapital Bank, The Rees-Jones Foundation, Jane and Bud Smith, and The Sparrow Foundation.

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