

UCLA researchers, U.S. military collaborate to open center for traumatic brain injury

National Intrepid Center of Excellence will treat veterans returning from combat

By Mark Wheeler June 25, 2010

The U.S. Department of Defense and the Intrepid Fallen Heroes Fund on June 24 officially dedicated the National Intrepid Center of Excellence, a new 72,000-square-foot medical facility in Bethesda, Md., dedicated to researching, diagnosing and treating traumatic brain injury in U.S. military personnel.

David Hovda, director of the [UCLA Brain Injury Research Center](#) and a nationally renowned expert in the field, played a major role in helping to frame the creation of the Intrepid Center and in raising awareness about traumatic brain injury among soldiers.

"Cerebral concussions are significant injuries that can happen during a battlefield deployment, such as in an improvised explosive device (IED) attack," said Hovda, a UCLA professor of neurosurgery who has advised the Pentagon on traumatic brain injury. "This center will be essential in exploring what happens to the brain during an IED explosion and offer potential therapies and protocols for healing."

The research of Hovda and others — which has helped inform the mission of the new Intrepid Center — has shown that in IED explosions, the head receives a violent thrust, causing the brain to collide with the skull. As a defense mechanism, the brain can begin to shut down, lowering its activity level in order to begin the process of repair.

Both magnetic resonance spectroscopy and positron emission tomography brain scans have shown depressed metabolic activity in the brain after a concussion, compared with a normally functioning brain. If another blow to the head occurs during this vulnerable period, the injury to the brain can be more severe and could cause long-term dysfunction.

Hovda and his UCLA colleagues, Dr. Paul Vespa, a professor of neurosurgery and neurology and director of the neurocritical care program at UCLA, and Dr. Christopher Giza, a UCLA associate professor of neurosurgery and pediatric neurology, joined forces with Arnold Fisher, honorary chairman of the [Intrepid Fallen Heroes Fund](#), to raise awareness of cerebral concussion and to conceive a plan to build the [National Intrepid Center of Excellence](#).

Ultimately, Hovda's research and work will seek to improve the lives and mental health of our returning military service members.

UCLA is also collaborating with the military in [Operation Mend](#), a unique partnership between Ronald Reagan UCLA Medical Center, Brooke Army Medical Center in San Antonio, Texas, and the Veterans Affairs–Greater Los Angeles Healthcare System. Operation Mend has been established to help treat U.S. military personnel wounded during service in Iraq and Afghanistan. More information is available at www.operationmend.ucla.edu.

The UCLA Brain Injury Research Center, part of the UCLA Department of Neurosurgery, maintains a comprehensive basic and clinical scientific program in the field of traumatic brain injury (TBI). Its scientists conduct research into imaging, neurophysiology, molecular biology, modeling and behavioral neuroscience in order to apply this knowledge toward understanding the neurobiology of human TBI.