For Immediate Release





## Mind Research Network and UNM Introduce 'Brain Safe' Project to Understand and Minimize Concussions on NCAA Athletes

## Brain Safe Project to examine UNM athletes' brains over course of careers

Chris Cervini — October 09, 2013



Pictured is a sagittal view of a structural MRI image. Structural MRI is a non-invasive technique for examining the physical structures of the brain. Structural images are just one of the many types of brain data collected using the Brain Safe protocol.

*ALBUQUERQUE, N.M.* – The nonprofit Mind Research Network (MRN) has partnered with the University of New Mexico (UNM) to introduce Brain Safe, an innovative, state-of-the-art sports-related concussion assessment program designed to study and minimize the impact of brain injury on NCAA athletes in contact sports.

More than 200 UNM athletes will receive a noninvasive MRI scan of brain structure, chemistry, connectivity and function at the beginning every season. Every year, or after any acute injury, the athlete will be scanned again and the results will be compared to their initial baseline MRI. Using this 'within-subject' design, the athlete's baseline MRI scans can be precisely compared to postinjury scans. Highly sophisticated MRI analyses will be performed using algorithms developed by MRN and UNM scientists to

identify any brain related injuries.

The MRI scans are completely non-invasive and provide the most advanced technology for understanding, and ultimately preventing sports-related brain injuries. The project started this fall with initial brain scans of student-athletes playing football, women's and men's soccer, women's and men's basketball, and women's volleyball.

Dr. Kent Kiehl, director of the Brain Safe Project, said this approach will give scientists a better understanding of the changes a brain undergoes following an injury.

"This is the first large scale project to gather state-of-the-art MRI data on athletes' brains at the beginning of their collegiate career," Kiehl said. "By performing the initial baseline scans, we are in the best possible position to examine whether sports-related impacts alter, or not, the function and structure of the brain. We can also track carefully brain recovery and help to inform concussion assessment and treatment policy."

Brain scans will be conducted on athletes as part of annual physical examinations and will be compared to the athletes' scans from previous years. The annual brain scans will allow scientists to determine long-term effects of concussions that were often undetectable in the past.

"Our top concern is the safety of our athletes," said UNM Athletic Director Paul Krebs. "This is one more tool for our team doctors to use to make sure that when we return a student athlete to play we are making that decision based on the very best medical information available."

UNM President Robert G. Frank, who ran a brain injury program for eight years while at the University of Missouri, believes this program is essential to preventing long-term consequences of concussions. "This could be a game changer." Frank said. "Combining our mind research and our athletics program to create a protocol that will measure the individual against him or herself is one of the most advanced and sophisticated approaches in the country."

Kiehl says that the annual examinations will go a long way toward treating brain injuries in the future. "We don't currently know how these problems manifest because no one has ever tracked the changes in athletes' brains for this long of a period," Kiehl said. "By starting with initial baseline MRIs and proceeding with additional scans and neuropsychological tests over the years, we will be able to come up with new treatments for brain injuries that will allow those affected to live longer, healthier lives."

Frank said UNM is proud to be leading the way in this cutting edge approach to an issue of critical concern in the athletic world. The Mind Research Network plans to offer the Brain Safe protocol to other universities, high schools, and the general public in the near future. This project is also being supported by Perfection Honda of New Mexico, which is providing a transport vehicle for the program.

For more information about the Mind Research Network, visit <u>http://www.mrn.org/</u>, and for more information about the Brain Safe project, visit <u>http://www.brainsafeproject.com</u>.

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