

Medical Research

The NFL is investing in and supporting preeminent experts and institutions to advance progress in the prevention, diagnosis and treatment of head injuries.



OVERVIEW

The NFL continues to support research endeavors that build upon the growing body of knowledge that informs how to keep players safer on and off the field. The NFL's commitment to supporting research aims to have an impact far beyond football—benefiting athletes, the military and society, overall.



Through the *Play Smart. Play Safe.* initiative, more than \$40 million in funding has been allotted for additional scientific and medical research over the next five years, primarily dedicated to neuroscience. A new Scientific Advisory Board, comprising leading independent experts, doctors, scientists and clinicians, has been assembled to work with the NFL's medical committees to identify and develop research priorities.

THE NFL'S SCIENTIFIC ADVISORY BOARD

Renowned Leadership to Guide Medical and Neuroscience Research Funding

The NFL has assembled a Scientific Advisory Board of leading independent experts, doctors, scientists and clinicians to develop and lead a clear process to identify and support compelling proposals for scientific research.

In September 2017, the NFL opened a funding opportunity for innovative translational research on concussion and comorbid conditions, including chronic traumatic encephalopathy (CTE), as well as the natural history of concussion and associated comorbid conditions. This funding opportunity is the result of the Scientific Advisory Board's work to develop a process for soliciting, reviewing and evaluating research proposals and directing funding.

The Scientific Advisory Board is accepting proposals from leading research teams in concussion and comorbid conditions to receive up to \$20 million in grant funding over the next three to five years to support their work. The funding opportunity is intended to facilitate the translation of original, ongoing and existing research into clear clinical end points, such as progressing diagnostics, drugs, devices and treatments that advantage the patient, as well as advance understanding of the potential short- and long-term effects of concussion and associated comorbid conditions.

The intent of the initiative is to demonstrate the potential for translational breakthroughs by leveraging emerging science, current data sets and archival material on concussion and comorbid conditions.

Funding awards will be announced in early 2018.

Members of the NFL's Scientific Advisory Board



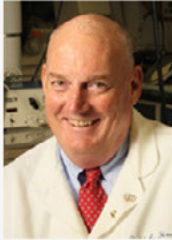
Peter Chiarelli, Gen. (Ret.) Chairman

General Chiarelli, U.S. Army General (Retired), is Chief Executive Officer of One Mind, a brain illness related non-profit organization that works with members in the governmental, corporate, scientific and philanthropic communities to greatly accelerate large-scale research through "Open Science" data sharing and collaboration.



Sidney Hinds, M.D., M.C., Col.

Colonel Hinds is a Brain Health Research Program Coordinator at the Department of Defense, where he coordinates neurological and psychological protection, prevention, evaluation, diagnosis, treatment and rehabilitation research as it pertains to blast injury. He previously served as the National Director of the Defense and Veterans Brain Injury Center (DVBIC), which serves active duty military and veterans with traumatic brain injury through state-of-the-art medical care and care coordination, and innovative clinical research and educational programs.



David Hovda, Ph.D.

Dr. Hovda is the Director of the UCLA Brain Injury Research Center. He is Past President of the National Neurotrauma and International Neurotrauma Societies. He has served as chair of study sections for the National Institute for Neurological Disease and Stroke (NINDS). He has received a number of awards for his research on brain injury and recovery of function, including the 1991 National Head Injury Foundation Award, the Giannini Foundation Award, the Benjamin Franklin Haight Memorial Award, the 2008 Deborah L. Warden Lectureship Award and was named the Lind Lawrence Eminent Scholar for his work on the topic of Traumatic Brain Injury.



David J. Shulkin, M.D.

The Honorable Dr. David J. Shulkin is Secretary of the United States Department of Veterans Affairs. Prior to his confirmation as Secretary, Dr. Shulkin served as the VA's Under Secretary for Health, leading the nation's largest integrated healthcare system with over 1,700 sites of care, serving 8.76 million veterans each year.



Douglas H. Smith, M.D.

Dr. Smith serves as Director of the Center for Brain Injury and Repair and is the Robert A. Groff Endowed Professor and Vice Chairman for Research and Education in Neurosurgery at the Perelman School of Medicine, University of Pennsylvania. Dr. Smith is also the Scientific Director for the Big 10/Ivy League consortium on concussion. For research awards, he is director of several multi-center National Institutes of Health (NIH) and Department of Defense grants on concussion and TBI-induced neurodegeneration, as well as for an NIH training grant on brain injury. Recent scientific awards for these contributions include the Dorothy Russell Medal, the highest honor conveyed by the British Neuropathological Society.



Shelly D. Timmons, M.D., Ph.D.

Dr. Timmons serves as Director of Neurotrauma, Vice Chair for the Administration Department of Neurosurgery, and Professor of Neurosurgery at Penn State Health Milton S. Hershey Medical Center. She has been a clinical researcher for a number of years, and has participated as principal investigator in numerous clinical trials related to traumatic brain injury. She has published and lectured on a variety of topics related to traumatic brain injury, neurocritical care, spinal cord injury, blunt vascular injury and healthcare delivery throughout her career.

"These are all individuals who have dedicated their lives to understanding concussion, traumatic brain injury and the brain."

Peter Chiarelli
U.S. Army General (Retired)
Chief Executive Officer of One Mind
Chairman of the NFL's Scientific Advisory Board

INTERNATIONAL COLLABORATIONS

Global Reach, Global Impact

In both 2014 and 2015, the NFL brought together leaders from international sports leagues to identify promising areas for collaborative research.

The NFL held the first International Professional Sports Concussion Research Think Tank in New York in 2014. The organizations came together for a second time in 2015 to continue this work. These meetings have identified research priorities that are being addressed through several joint research initiatives.

Most recently, scientists at the University of North Carolina at Chapel Hill and the Medical College of Wisconsin received a \$2.6 million grant from the NFL for a study, one of the first of its kind, that will examine the efficacy of two clinically supervised management strategies, including both the international concussion return-to-play protocol and early therapeutic interventions on concussions.

This research will look at rehabilitation in a range of sports, including football, rugby, soccer, lacrosse, basketball and ice hockey. Professional athletes from the Canadian Football League (CFL) and New Zealand Rugby, college athletes and U.S. high school athletes are participating in the study.

Other collaborative research initiatives are well underway including:



A collaboration between the NFL and CFL to jointly examine how an eye-movement test—the King-Devick test—may improve concussion diagnosis on the sideline.



A partnership between the NFL and the International Concussion and Head Injury Research Foundation (ICHIRF) to fund research into the potential long-term effects and risk factors associated with high-impact sports, including horse racing.