Through investments in independent scientific and medical research, the NFL is working to accelerate research important to athlete health and safety. These initiatives aim to impact not only football but athletes of all sports and society overall. Highlights of the NFL’s research investments include:

**GE – NFL Head Health Initiative**
This **$60 million multi-year collaboration** was designed to spur innovation and scientific advancement and has since launched promising new breakthroughs and continues to serve as an important platform to accelerate concussion research, prevention, diagnosis and treatment. The initiative includes two components:

- **$20 Million Open Innovation Program**: The program provides grants for innovative solutions from scientists, academics, experts and entrepreneurs worldwide aimed to detect and prevent mild traumatic brain injury. To date, the following three open innovation challenges have spurred more than one thousand innovative concepts:
  - **Head Health Challenge I** (in partnership with GE): Diagnosis and Prognosis of Mild Traumatic Brain Injuries
    - Round one winners—16 in total—were awarded $300,000 each
    - Final winners—6 in total—were awarded an additional $500,000 each
  - **Head Health Challenge II** (in partnership with GE and Under Armour): Prevention of Brain Injuries
    - Round one winners—7 in total—received $500,000 each
    - Grand prize winners—3 in total—received up to an additional $1 million each
  - **Head Health Challenge III** (in partnership with GE, Under Armour and NIST):
    Development of advanced materials for impact mitigation
    - Round one winners—5 in total—received $250,000 each
    - Grand prize winner—1 in total—will receive $500,000

- **$40 Million Research and Development Initiative**: The goal of this initiative is to develop next-generation imaging technologies to improve the diagnosis and treatment of patients with mild traumatic brain injury. Clinical studies are taking place at some of the nation’s leading institutions.

**Foundation for the National Institutes of Health (FNIH)**
In 2012, the NFL made a **$30 million contribution** to the Foundation for the National Institutes of Health (FNIH) to advance scientific understanding of concussion and head injury in athletes, members of the military and the general population. The initial round of awards (totaling approximately $14 million) included:

- To date, **$12 million has been allocated for pathology studies** through the Sports and Health Research Program (SHRP), **two $6 million cooperative agreements** dedicated to defining the long-term changes that occur in the brain after a head injury or multiple concussions.
  - Boston University School of Medicine and U.S. Department of Veterans Affairs received **$6 million** for a study on CTE and post-traumatic neurodegeneration
  - Mount Sinai Hospital received **$6 million** for a study the neuropathology of CTE and Delayed Effects of TBI
- Additionally, the grant funded six pilot projects **totaling more than $2 million**, to provide support for the early stages of sports-related concussion projects.
**International Collaboration**

Beginning in 2014, the NFL convened representatives from many of the world’s major sports leagues and leading concussion experts for an annual *International Professional Sports Concussion Research Think Tank* to share best practices and protocols and collaborate on ways to advance progress. Projects already underway include:

- Partnership with the **Canadian Football League (CFL)** to study the King-Devick test as a method for diagnosing concussion with professional and college football players. The goal is to see if the test improves the accuracy of diagnosis and therefore identifies players who need to be removed from play—and those who do not.

- Partnership with **International Concussion and Head Injury Research Foundation (ICHIRF)** to fund research investigating the potential long-term effects and risk factors associated with concussion in sports.

**NFL Medical Committee Research Initiatives**

The NFL is advised by leading medical and scientific experts through several specialized medical committees. These committees work to explore issues of importance to the health and safety of football players through a number of research initiatives. For example, in 2015, the NFL and NFL Players Association (NFLPA) jointly sponsored a study to assess the performance of helmets worn by NFL players. Importantly, this study is the first of its kind to account for rotational velocity and rotational acceleration in measuring the performance of the helmets. There is mounting scientific evidence that concussions have a component of their injury caused by rotational motions of the head impact.

**Partnership for Clean Competition**

The Partnership for Clean Competition (PCC) was established in 2008 by four founding partners: the National Football League (NFL), Major League Baseball (MLB), the U.S. Olympic Committee (USOC) and the U.S. Anti-Doping Agency (USADA). The PCC works to protect the integrity of sport and public health by supporting leading scientists and innovators in anti-doping research and development.