

**AMENDMENT TO**  
**RULES COMMITTEE PRINT 119-33**  
**OFFERED BY MR. FITZGERALD OF WISCONSIN**

At the end of subtitle C of title VII, add the following new section:

1 **SEC. 7\_\_\_ . RESEARCH AND ANALYSIS ON OPTIMAL PRO-**  
2 **TECTION STRATEGIES FOR PREVENTING**  
3 **TRAUMATIC BRAIN INJURY IN MEMBERS OF**  
4 **THE ARMED FORCES.**

5 (a) IN GENERAL.—Not later than 90 days after the  
6 date of the enactment of this Act, the Secretary of Defense  
7 shall seek to enter into an agreement with a multi-univer-  
8 sity research center focused on physics-based neutraliza-  
9 tion of threats to human tissues and organs to conduct  
10 research on understanding and preventing traumatic brain  
11 injuries in members of the Armed Forces.

12 (b) ELEMENTS.—The research conducted under sub-  
13 section (a) shall seek to achieve the following:

14 (1) Determine critical cell-based injury thresh-  
15 olds in the brain due to blunt, blast, or directed en-  
16 ergy exposures.

1           (2) Identify critical molecular injury pathways  
2           for developing a holistic understanding of brain in-  
3           jury and its neurodegenerative sequelae.

4           (3) Define force and energy transmission from  
5           outside the head to the brain.

6           (4) Define factors that influence subject-specific  
7           relative risk of injury.

8           (5) Develop exposure monitors to predict onset  
9           of brain injury.

10          (6) Develop countermeasure systems to opti-  
11          mally protect members of the Armed Forces from  
12          brain injury stemming from multimodal threats and  
13          operations in complex environments.

