

4000 DEFENSE PENTAGON WASHINGTON, D.C. 20301-4000

MAR 1 1 2021

The Honorable Jon Tester Chairman Subcommittee on Defense Committee on Appropriations United States Senate Washington, DC 20510

Dear Mr. Chairman:

The Department's report in response to Senate Report 115–290, page 209, accompanying S. 3159, the Department of Defense (DoD) Appropriations Bill, 2019 on Traumatic Brain Injury (TBI) and Psychological Health (PH), is enclosed.

The final report covers Fiscal Year (FY) 2019 congressional appropriations for TBI/PH (\$125M), and summarizes the FY 2019 TBI/PH Congressional Special Interest (CSI) expenditures, including the TBI/PH CSI-funded projects across five Defense Health Program core research areas: Complex TBI Rehabilitation; Injury Prevention and Readiness Related to Blunt, Blast, and Accelerative Injury; Neurotrauma, Neuroprotection, and Neurodiagnostics; PH and Resilience; and Warfighter Performance, Resilience, Enhancement, and Protection.

The DoD continues to support research in the prevention, detection, diagnosis, treatment, and rehabilitation of TBI and PH issues through various agreements with government organizations, as well as academic, non-profit, and other civilian research institutions, with the ultimate goal to improve preventative and management strategies for TBI and associated PH issues in the military and civilian populations.

Thank you for your continued strong support for our Service members, civilian workforce, and families. I am sending similar letters to the other congressional defense committees.

Sincerely,

//SIGNED//

Virginia S. Penrod Acting

Enclosure: As stated

cc:

The Honorable Richard C. Shelby Vice Chairman



**4000 DEFENSE PENTAGON** WASHINGTON, D.C. 20301-4000

The Honorable Betty L. McCollum Subcommittee on Defense Committee on Appropriations U.S. House of Representatives Washington, DC 20515

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The Honorable Ken Calvert Ranking Member



4000 DEFENSE PENTAGON WASHINGTON, D.C. 20301-4000

MAR 1 1 2021

The Honorable Adam Smith Chairman Committee on Armed Services U.S. House of Representatives Washington, DC 20515

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Enclosure: As stated

cc:

The Honorable Mike D. Rogers Ranking Member



4000 DEFENSE PENTAGON WASHINGTON, D.C. 20301-4000

The Honorable Jack Reed Chairman Committee on Armed Services United States Senate Washington, DC 20510

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//SIGNED//

Virginia S. Penrod Acting

Enclosure: As stated

cc:

The Honorable James M. Inhofe Ranking Member

# **Report to Congressional Defense Committees**



# Traumatic Brain Injury/Psychological Health

March 2021

**In Response to:** Senate Report 115–290, page 209, accompanying S. 3159, the Department of Defense Appropriations Bill, 2019

The estimated cost of this report for the Department of Defense (DoD) is approximately \$1,800.00 for Fiscal Years 2019–2020. This includes \$800.00 in expenses and \$1,000.00 in DoD labor.

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#### **PURPOSE**

This final report is in response to Senate Report 115–290, page 209, accompanying S. 3159, the Department of Defense (DoD) Appropriations Bill, 2019, requesting the Assistant Secretary of Defense for Health Affairs (ASD(HA)) to provide a report to the congressional defense committees on expenditure and obligation data of additional funding added by Congress for Psychological Health (PH) and Traumatic Brain Injury (TBI), including information on agreements made with other government agencies.

As directed by the Office of the ASD(HA), the Defense Health Agency manages the Defense Health Program (DHP) Research, Development, Test, and Evaluation (RDT&E) appropriation. The U.S. Army Medical Research and Development Command provides execution management for the DHP RDT&E TBI/PH Congressional Special Interest (CSI) funds.

# Fiscal Year (FY) 2019 DHP TBI/PH CSI EXPENDITURES

Toward the goal of developing improved preventative and management strategies for TBI and associated PH issues in both the military and civilian populations, the DoD continues to support research into the prevention, detection, diagnosis, treatment, and rehabilitation of TBI and PH issues.

Table 1 summarizes the FY 2019 TBI/PH CSI expenditures by category. Table 2 provides a list of FY 2019 DHP TBI/PH CSI research investments including agreements made with other government agencies.

Table 1. FY 2019 TBI/PH CSI Expenditures Summary

FY 2019 TBI/PH Congressional Appropriation	\$125,000,000
Small Business Innovation Research	\$4,040,000
(SBIR)/Small Business Technology Transfer	
(STTR) Withholds	
Management Costs	\$6,489,469
Research*	\$114,470,531

<sup>\*</sup>See Table 2 for additional information on the research projects.

Table 2. FY 2019 TBI/PH CSI Research Investments

Research Area	Title	Organization(s)	FY 2019 Investment
Complex TBI Rehabilitation	Identifying Objective Multimodal Predictors of Military/Operational Readiness and Recovery in Mild TBI Rehabilitation	General Dynamics Information Technology	\$965,744
Complex TBI Rehabilitation	A Pragmatic Rehabilitation Intervention to Supplement Progressive Return to Activity Following Mild Traumatic Brain Injury in Service Members (SMs): The Active Rehab Study	University of North Carolina at Chapel Hill	\$3,127,823
Complex TBI Rehabilitation	Control Network Neuromodulation to Enhance Cognitive Training in Complex Traumatic Brain Injury (The CONNECT-TBI Trial)	University of New Mexico Health Sciences Center	\$3,806,168
Complex TBI Rehabilitation	Multisite Randomized Controlled Trial of Targeted Multidomain (T-MD) Interventions for Complex mTBI	University of Pittsburgh	\$3,155,621
Complex TBI Rehabilitation	Treatment of Verbal Retrieval Deficits in Mild Traumatic Brain Injury with High Definition Transcranial Direct Current Stimulation	University of Texas at Dallas	\$2,022,628
Complex TBI Rehabilitation	INVENT VPT Trial: Incremental Velocity Error as a New Treatment in Vestibular Rehabilitation	Fort Belvoir Community Hospital; Walter Reed National Military Medical Center	\$5,300
Complex TBI Rehabilitation	Objective Dual-Task Turning Measures for Return-to-Duty Assessment	Fort Sam Houston	\$141,720
Complex TBI Rehabilitation	Objective Multimodal Assessment of Cognitive and Sensorimotor Function After Mild TBI in Static and Dynamic Environments	Naval Health Research Center	\$6,000
Complex TBI Rehabilitation	Randomized Controlled Trial of Precision Vestibular Rehabilitation in Military Personnel with mTBI	Warrior Recovery Center, Fort Carson	\$1,800
Complex TBI Rehabilitation	The Use of Mobile Visual and Auditory Technologies to Implement Augmented Reality Tasks for Vestibular Physical Therapy	Naval Health Research Center	\$50,000

Research Area	Title	Organization(s)	FY 2019 Investment
Injury Prevention and Readiness Related to Blunt, Blast, and Accelerative Injury	Restoring Memory with Task- Independent Semi-Chronic Closed- Loop Direct Brain Stimulation and Non- Invasive Closed-Loop Stimulus Timing Optimization	University of Pennsylvania	\$494,007
Injury Prevention and Readiness Related to Blunt, Blast, and Accelerative Injury	Development of Survivability Criteria and Vital Organ Injury Metrics for Whole Body when Exposed to Extreme Blast	Geneva Foundation	\$989,680
Injury Prevention and Readiness Related to Blunt, Blast, and Accelerative Injury	Behind Helmet Blunt Trauma - Army Combat Helmet Damage Reconstruction	Army Research Laboratory; U.S. Army Aeromedical Research Laboratory	\$970,000
Injury Prevention and Readiness Related to Blunt, Blast, and Accelerative Injury	Behind Helmet Blunt Trauma - Porcine Brain Injury Analysis	Uniformed Services University of the Health Sciences	\$620,000
Injury Prevention and Readiness Related to Blunt, Blast, and Accelerative Injury	Characterization of Blast Exposure in a Large Sample of Military Personnel in Combat and Noncombat Environment	Naval Health Research Center	\$394,000
Injury Prevention and Readiness Related to Blunt, Blast, and Accelerative Injury	Maintenance and Expansion of the Marine Recruit Assessment Program	Naval Health Research Center	\$984,000

Research Area	Title	Organization(s)	FY 2019 Investment
Neurotrauma, Neuroprotection, and Neurodiagnostic s	A New 'Medical Record for the Brain' Enabling Precision Management of TBI	Moberg Research, Inc.	\$1,500,000
Neurotrauma, Neuroprotection, and Neurodiagnostic s	BurRapid Epidural Drainage Attachment for Traumatic Brain Injury	Critical Innovations	\$466,942
Neurotrauma, Neuroprotection, and Neurodiagnostic s	In-Field Detection of Acute Subdural Hematomas Requiring Urgent, Life- Saving Treatment in Severe TBI Patients	Kitware	\$4,844
Neurotrauma, Neuroprotection, and Neurodiagnostic s	New Biomarker Kit for Noninvasive and Early Mild Brain Injury Detection	Medicortex Finland Oy	\$130,520
Neurotrauma, Neuroprotection, and Neurodiagnostic s	Precision Intracranial Bleed Triage and Monitoring	Neural Analytics	\$1,491,362
Neurotrauma, Neuroprotection, and Neurodiagnostic s	A Personalized Approach to Predicting Long-Term Neuro-Psychiatric Outcomes in TBI	Indiana University Bloomington	\$749,997
Neurotrauma, Neuroprotection, and Neurodiagnostic s	Biomarker-Based Precision Medicine Approach to Traumatic Brain Injury Subphenotypes	SUNY Downstate Medical Center	\$1,489,386
Neurotrauma, Neuroprotection, and Neurodiagnostic s	Trajectories of Insomnia and Impact on Recovery Following Traumatic Brain Injury	University of Maryland, Baltimore	\$750,000

Research Area	Title	Organization(s)	FY 2019 Investment
Neurotrauma, Neuroprotection, and Neurodiagnostic s	The Effects of Complete and Partial Resuscitative Endovascular Balloon Occlusion of the Aorta (REBOA) with Pharmacologic Treatment in Swine Models of Hemorrhagic Shock, Traumatic Brain Injury, and Complex Vascular Injuries	University of Michigan	\$211,787
Neurotrauma, Neuroprotection, and Neurodiagnostic s	The University of California, Davis (UCD)-David Grant USAF Medical Center (DGMC) TBI Precision Medicine Network for Complex Trauma	University of California, Davis	\$1,499,928
Neurotrauma, Neuroprotection, and Neurodiagnostic s	Characterizing Concussion Using Brain- Derived Exosomes	University of Pennsylvania	\$1,147,352
Neurotrauma, Neuroprotection, and Neurodiagnostic s	Development and Evaluation of a Solid State Head CT	University of North Carolina at Chapel Hill	\$696,212
Neurotrauma, Neuroprotection, and Neurodiagnostic s	Evaluation of Partial Flow Strategies in Hemorrhage and Traumatic Brain Injury with Endovascular Variable Aortic Control	Wake Forest University Health Sciences	\$998,608
Neurotrauma, Neuroprotection, and Neurodiagnostic s	FITBIR: Accelerating Synthesis of TBI Research Using Novel Methods (FAST RUN Methods)	Oregon Health and Science University	\$749,995
Neurotrauma, Neuroprotection, and Neurodiagnostic s	Impact of REBOA and Tranexamic Acid on Clot Structure and Secondary Brain Injury Following Severe Polytrauma, Hemorrhagic Shock, and Traumatic Brain Injury	University of Colorado at Denver	\$1,000,000
Neurotrauma, Neuroprotection, and Neurodiagnostic s	Leveraging FITBIR Data to Improve Clinical Practice of Severe TBI	University of Texas Health Science Center at Houston	\$749,446

Research Area	Title	Organization(s)	FY 2019 Investment
Neurotrauma, Neuroprotection, and Neurodiagnostic s	MR Imaging Biomarkers of Microstructure Relating to Cognitive Performance After Mild Traumatic Brain Injury	New York University School of Medicine	\$718,756
Neurotrauma, Neuroprotection, and Neurodiagnostic s	Optimizing Concussion Care Seeking (OCCS) in Military Service Members and Athletes: A Machine Learning Approach Using CARE Consortium Data	University of Georgia	\$749,976
Neurotrauma, Neuroprotection, and Neurodiagnostic s	Precision Treatment of Inflammation After Polytrauma Using a Melanocortin Fusion Protein	University of Washington	\$420,553
Neurotrauma, Neuroprotection, and Neurodiagnostic s	Rapid Ketone Infusion to Prevent Brain Energy Depletion and Secondary Brain Injury in Severe TBI with Hemorrhagic Shock	University of Cincinnati	\$666,397
Neurotrauma, Neuroprotection, and Neurodiagnostic s	Team Approach to the prevention and treatment of Post-Traumatic Epilepsy (TAPTE)	CURE (Citizens United for Research in Epilepsy)	\$932,538
Neurotrauma, Neuroprotection, and Neurodiagnostic s	Sex Differences in Cognitive and Mental Health Functioning Following Mild Traumatic Brain Injury	Veterans Medical Research Foundation of San Diego	\$387,779
Neurotrauma, Neuroprotection, and Neurodiagnostic s	Increasing Survival Rate Following Hemorrhagic Shock and Traumatic Brain Injury in Austere Environments	U.S. Army Aeromedical Research Laboratory	\$102,940
Neurotrauma, Neuroprotection, and Neurodiagnostic s	Individualized Medicine in a Gyrencephalic Model of TBI Polytrauma Through the Continuum of Care	Uniformed Services University of the Health Sciences	\$1,084,000

Research Area	Title	Organization(s)	FY 2019 Investment
Neurotrauma, Neuroprotection, and Neurodiagnostic s	Investigation of Novel Non-Kinetic Mechanisms of Injury Related to Brain and Vestibular Pathologies in the Non- Human Primate	U.S. Army Medical Research Institute of Chemical Defense	\$7,513,884
Neurotrauma, Neuroprotection, and Neurodiagnostic s	Mesenchymal Stem Cell Therapy for Traumatic Brain Injury	U.S. Army Institute of Surgical Research	\$540,492
Neurotrauma, Neuroprotection, and Neurodiagnostic s	Long-Term Impact of Military-Relevant Brain Injury Consortium (LIMBIC) Award	Virginia Commonwealth University; Fort Belvoir; Walter Reed National Military Medical Center; Dwight D. Eisenhower Army Medical Center	\$6,686,319
Neurotrauma, Neuroprotection, and Neurodiagnostic s	Role of miRNA in mTBI and PTSD: Identification of Biomarkers and Therapeutic Strategies	Uniformed Services University of the Health Sciences	\$209,000
Neurotrauma, Neuroprotection, and Neurodiagnostic s	Does Venous Thrombosis Chemoprophylaxis (VTC) Adversely Affect the Hemorrhagic Lesion In a Preclinical Model of Penetrating Traumatic Brain Injury?	Naval Medical Research Center; Walter Reed Army Institute of Research	\$190,744
Neurotrauma, Neuroprotection, and Neurodiagnostic s	Severe TBI Triage and Monitoring with Advanced Cerebral Hemodynamics	San Antonio Military Medical Center	\$4,000
Neurotrauma, Neuroprotection, and Neurodiagnostic s	TRACK-TBI Precision Medicine - Pathomechanistic Classification of Traumatic Brain Injury: The Bridge to Targeted Therapies	Walter Reed National Military Medical Center	\$2,250
Neurotrauma, Neuroprotection, and Neurodiagnostic s	Ultra-High Performance MRI System for Microstructure and Functional Assessment of TBI	Walter Reed National Military Medical Center; Fort Belvoir	\$8,100

Research Area	Title	Organization(s)	FY 2019 Investment
Neurotrauma, Neuroprotection, and Neurodiagnostic s	UCSF/USUHS Partnership to Develop Tau Prion Therapeutics for Chronic Traumatic Encephalopathy	Uniformed Services University of the Health Sciences; University of California, San Francisco	\$23,056,000
Neurotrauma, Neuroprotection, and Neurodiagnostic s	Accelerating Progress in Traumatic Brain Injury Research and Care - A National Academies of Sciences, Engineering, and Medicine Consensus Study	National Academy of Sciences*	\$985,372
Neurotrauma, Neuroprotection, and Neurodiagnostic s	Biomarkers for Detection and Treatment of Traumatic Brain Injury	Los Alamos National Laboratory*	\$1,001,111
Neurotrauma, Neuroprotection, and Neurodiagnostic s	Federal Interagency Traumatic Brain Injury Research (FITBIR) Informatics System Operation and Management Costs	National Institute of Neurological Disorders and Stroke*	\$4,017,596
PH and Resilience	MSAT: Mobile Stress and Anger Management Tool	Design Interactive, Inc.	\$2,031,881
PH and Resilience	Owl Fatigue Meter to Support Fatigue Risk Management and Medical Readiness on Navy Surface Warfare Platform	Pulsar Informatics, Inc.	\$550,000
PH and Resilience	Trauma-Informed Guilt (TriGR) Intervention	Brown University; Veterans Medical Research Foundation, San Diego	\$794,900
PH and Resilience	Unlocking What Makes Military Behavioral Health Interventions Work, Stumble, or Fade Away: Understanding Barriers and Facilitators that Can Be Applied to Sexual Assault Prevention	New York University	\$1,188,750
PH and Resilience	Fort Campbell Cohort Study	New York University School of Medicine	\$3,086,787
PH and Resilience	Behavioral Health and Resilience Training for Military Leaders	Oregon Health and Science University	\$13,240

Research Area	Title	Organization(s)	FY 2019 Investment
PH and Resilience	Evaluation of a Work-Family and Sleep Leadership Intervention in the Oregon National Guard: A Behavioral Leadership Approach	Oregon Health and Science University	\$195,400
PH and Resilience	Building a Better Workplace: A Sexual Harassment and Assault Prevention Program for Active Duty Service Members	University of Texas Health Science Center at Houston	\$1,140,046
PH and Resilience	Optimizing Human Resources to Address Battalion-Level Factors That May Impede or Support Implementation of Sexual Assault and Sexual Harassment Prevention Programs	University of Texas at Austin	\$663,856
PH and Resilience	Military Suicide Research Consortium: Extension to New Opportunities and Challenges	Florida State University	\$822,666
PH and Resilience	Mindfulness-Based Attention Training to Bolster Small Team Performance	University of Miami	\$5,039
PH and Resilience	SMART Optimization of a Parenting Program for Active Duty Families	University of Minnesota	\$200,000
PH and Resilience	Strength at Home Couples Program: Examining Sexual Aggression	Boston University Medical Campus	\$274,149
PH and Resilience	Vocal Analysis for PTSD	MIT Lincoln Laboratory	\$125,000
PH and Resilience	Sleep and Brain Health Expansion	MIT Lincoln Laboratory; Johns Hopkins University Applied Physics Laboratory	\$300,000
PH and Resilience	Adjustment Disorders in the U.S. Military: Addressing Gaps in Knowledge and Practice	Henry M. Jackson Foundation	\$388,000
PH and Resilience	DoD Psychological Health and TBI Research Program: Prevention Research to Reduce Sexual Assault	Research Triangle Institute	\$883,875
PH and Resilience	Prospective Cohort Study of Stellate Ganglion Block for Treatment of Posttraumatic Stress Disorder Symptoms and Other Nonpain Conditions	Research Triangle Institute	\$545,823
PH and Resilience	Secondary Analysis of Data from a Randomized Controlled Trial of Stellate Ganglion Block for Symptoms of Posttraumatic Stress Disorder	Research Triangle Institute	\$449,046

Research Area	Title	Organization(s)	FY 2019 Investment
PH and Resilience	Elucidating and Quantifying the Response of Down-Regulation Techniques on Physical and Cognitive Stress	Mayo Clinic	\$588,996
PH and Resilience	Personalized Web-Based Sexual Assault Prevention for Service Members	Rhode Island Hospital	\$720,285
PH and Resilience	RNA Expression in PTSD in Induced Human Neurons and Blood Cells in Basal and Glucocorticoid-Stimulated Conditions	Mount Sinai	\$431,795
PH and Resilience	Strength at Home Couples Program to Prevent Military Partner Violence	Boston VA Research Institute, Inc.	\$21,925
PH and Resilience	Testing Two Scalable, Veteran-Centric Mindfulness-Based Interventions for Chronic Musculoskeletal Pain: A Pragmatic, Multisite Trial	Minnesota Veterans Research Institute	\$674,983
PH and Resilience	Analytics for Remote Combat Exposure Assessment	Air Force 711th	\$215,000
PH and Resilience	Applying Spatial Analysis Tools to Understand the Relationship between Community Contextual Factors and Mental Health among Military Spouses enrolled in the Millennium Cohort Family Study	Naval Health Research Center	\$180,000
PH and Resilience	BH Pulse Electronic versus Paper- Pencil Administration	Army Resiliency Directorate	\$807,810
PH and Resilience	Comprehensive Psychological Health Assessment and Impact of Upstream Intervention Among Army/AF RPA Operators Engaged in ISR and Weapon Strike Combat Operations	U.S. Air Force School of Aerospace Medicine, Wright Patterson; Walter Reed Army Institute of Research	\$1,324,900
PH and Resilience	COPE Surveillance of Stressors in a Shipboard Environment	Naval Health Research Center	\$344,000
PH and Resilience	EAAA at USAFA: Intervention with the Fourth Degree Classes of Cadets	U.S. Air Force Academy	\$206,000
PH and Resilience	Identification of Blood-Based Biomarkers That Can Indicate Probability of PTSD Treatment Efficacy with Cognitive Processing Therapy	Walter Reed Army Institute of Research	\$650,000
PH and Resilience	Military and Contextual Factors Associated with Prospective Changes in Spouse Employment Status and Career Progression	Naval Health Research Center	\$180,000

Research Area	Title	Organization(s)	FY 2019 Investment
PH and Resilience	Modified Global Assessment Tool Development and Validation for Individual and Unit-Level Resilience	Army Resiliency Directorate	\$757,809
PH and Resilience	Optimizing the Scalability of Evidence- Based Behavioral Sleep Medicine Practices	Rehat, LLC (d/b/a NOCTEM); Walter Reed Army Institute of Research	\$1,250,399
PH and Resilience	Optimizing and Validating the Advanced Integrated Resilience System (AIRS) for Shipboard Sailors	Naval Health Research Center	\$428,000
PH and Resilience	PAL-3 COPE: Personalized AI and Human Coaching for Coping, Officer Support, and Mitigation of Destructive Behaviors	Natick Soldier Research, Development and Engineering Center	\$800,000
PH and Resilience	Preventing Sexual Violence Toward Male Victims Through Targeting Hazing Behavior	Womack Army Medical Center	\$849,994
PH and Resilience	Scaling Model for Blast-Induced Traumatic Brain Injury	Biotechnology High Performance Computing Software Applications Institute	\$900,000
PH and Resilience	Sleep-Wake Intracerebral Fluid Tracking (SWIFT) using Near-Infrared Light in Healthy and TBI patients - Imaging of Sleep Glymphatics	Uniformed Services University of the Health Sciences	\$345,000
PH and Resilience	Supporting Children from the Very Start with HealthySteps: Evaluation with Military Families	Naval Health Research Center	\$655,000
PH and Resilience	Systems Biology - Diagnostic (PTSD)	Walter Reed Army Institute of Research	\$1,500,000
PH and Resilience	Systems Biology - Subtyping (PTSD)	Walter Reed Army Institute of Research	\$1,500,000
PH and Resilience	Testing Two Interventions to Improve the Comfort and Skill of Mental Health Care Providers in Identifying and Working with Suicidal Patients	Naval Health Research Center	\$1,527,000
PH and Resilience	AURORA	National Institute of Mental Health*	\$1,250,000
Warfighter Performance, Resilience, Enhancement, and Protection	Brain Operant Learning Technologies (BOLT)	U.S. Army Combat Capabilities Development Command, Army Research Laboratory	\$1,700,000

Research Area	Title	Organization(s)	FY 2019 Investment
Warfighter Performance, Resilience, Enhancement, and Protection	Enhanced Resilience Training (ERT)/Team Overmatch - Phase II	Naval Air Warfare Center Training Systems Division	\$354,500

<sup>\*</sup>Denotes agreement with other government agencies.

#### **SUMMARY**

Congressional appropriations for the FY 2019 TBI/PH totaled \$125M, of which the DHP TBI/PH CSI expenditures for research approximated \$114.47M and an estimated \$4.04M for SBIR/STTR withholds. The FY 2019 DHP TBI/PH CSI funded 98 projects across five key research areas: Complex TBI Rehabilitation; Injury Prevention and Readiness Related to Blunt, Blast, and Accelerative Injury; Neurotrauma, Neuroprotection, and Neurodiagnostics; PH and Resilience; and Warfighter Performance, Resilience, Enhancement, and Protection. The DoD continues to support research in the prevention, detection, diagnosis, treatment, and rehabilitation of TBI and PH issues through various agreements with government agencies, as well as academic, non-profit, and other civilian research institutions, with the ultimate goal to improve preventative and management strategies for TBI and associated PH issues in the military and civilian populations. The Department remains committed to advancing TBI and PH research to assist Service members and their families.