INTREPID VOICES



Publication of the Defense Intrepid Network for TBI & Brain Health

July 2023

Built to Heal – NICoE at 13! The Defense Intrepid Network's Headquarters Celebrates 13 Years!

June 24, 2023, marked 13 years since the National Intrepid Center of Excellence (NICoE) opened its doors for the first time. As the headquarters of the Defense Intrepid Network for TBI and Brain Health, the NICoE provides a full spectrum of TBI care in a collaborative environment that promotes physical, psychological, and spiritual healing.

While many aspects of the NICoE are innovative, from its patient-centered interdisciplinary approach to assessing and treating TBI, to the four-week intensive outpatient program, to its rehabilitation technology, one part that is also worthy of note is the building itself.

The layout of the building is anchored by an Lshaped bar to signify the analytical, left side of the brain. This is where NICoE's research, clinical, and administrative functions take place. The main lobby represents the right side of the brain, where educational and therapy spaces reside, evoking the creative and intuitive side of the brain. Music, art, physical & occupational therapy are some of the support programs provided in this space.

The design process for NICoE went beyond the traditional structure of client, architect, contractor, and included patient advocates,

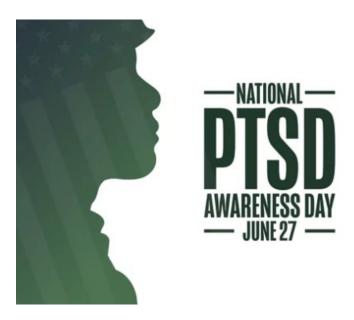


researchers and clinicians, the Department of Defense, and Veterans Affairs. Each member played an important part in designing this first-of-its-kind facility meant to serve the wounded warriors of our nation.

The Defense Intrepid Network has grown to include 10 Intrepid Spirit Centers and two TBI and Brain Health Clinics, with the interdisciplinary care model as the foundation of its care. Each site expedites diagnostic evaluations and delivers a collaborative individualized treatment plan. Over 80,000 service members have been treated for TBI since its inception.

The NICoE and the Network sites are central to TBI care and innovation across the Military Health System, and the Network is on track to become a Program of Record directly under the Defense Health Agency.

CAPS-5 and PSSI-5: Study holds promise for diagnosing PTSD



The advancement of effective assessment and treatment approaches for TBI and associated psychological health conditions, including post-traumatic stress disorder (PTSD), is a top priority to the Defense Intrepid Network. Co-occurring history of concussion and PTSD, often seen in service members, can be challenging to clinicians and researchers given the marked heterogeneity, intensity, and overlap of symptoms.

One study that hold promise to inform the sharpened characterization of PTSD is an IRBapproved study, "Psychometric Evaluation of the Clinician Administered PTSD Scale for DSM-5 (CAPS-5) and the PTSD Symptom Scale Interview for DSM-5 (PSSI-5) in an Active Duty and Military Veteran Sample." The CAPS-5 and PSSI-5, the two most utilized clinical assessment tools for diagnosing and treating PTSD, are incorporated in this study to evaluate aspects of psychometric reliability and validity.

While the multi-study has not closed the data set yet to assess preliminary findings, the knowledge gained from this study holds promise to impact the ability of clinicians to reliably diagnose PTSD and assess PTSD symptom severity. It will also increase the likelihood of technical and regulatory success of future clinical trials for the development of novel treatments" said Dr. Treven Pickett, the Department Chief of Research at the NICoE.

The study is robust, with many different partners, including Tripler Army Medical Center (TAMC). The principal investigators for this study are Dr. Kate Chard of the Cincinnati VA Medical Center and Dr. Brian Marx of the National Center for PTSD. The U.S. Army Medical Materiel Development Activity (USAMMDA) is the supporting agency. Dr. Pickett, the site-principal investigator for the study at the NICoE, believes multiagency involvement is necessary, as an undertaking of this scope would not be possible or one agency to take on alone.

"The efficient conduct of multi-site studies requires active, supportive organizational infrastructure and buy-in on all sides. High value research does not occur in a vacuum. Leadership support, cultural readiness, and an informed top-down appreciation for the implications of the scientific process are critical ingredients for success," Dr. Pickett said.

Abstract looks at concussions caused by 2020 theatre ballistic missile attack on U.S. soldiers stationed at Al Asad Air Base, Iraq

On Jan. 8, 2020, Iran launched 27 Theatre Ballistic Missiles into Iraq, 11 of which detonated inside Al Asad Airbase. Approximately 330 U.S. soldiers were exposed to Theatre Ballistic Missiles (TBM) blast waves that continued over three to four hours, exposing many to multiple successive TBM-blast waves. There were no casualties and no serious bodily injuries, at least not outwardly.

Human exposure to the blast waves of professionally manufactured TBM carrying high explosive payloads is an extremely rare occurrence in modern warfare. Within a day of the attacks, 87 individuals were diagnosed with traumatic brain injury (TBI). More were added to that list in the weeks that followed. The case series presents 35 concussed individuals medically evacuated from Al Asad, Iraq, to Landstuhl Regional Medical Center (LRMC), a tertiary U.S. Army hospital in Germany, over a three month period following the attack; and provides feedback from using the U.S. military's standard acute concussion screening tool, the Military Acute Concussion Examination version 2, in a deployed, chaotic, real-world environment.

Of those 87 diagnosed with TBI, 35 met the criteria for the study: individuals were on site at Al Asad on the night of the attack; they were moved to LRMC in Germany for evaluation within three months of the bombings; they were diagnosed with TBI by one of five TBI medical providers, per standard Department of Defense guidelines.



In the end, the study concluded that migraine and headache, cognitive and mood/anxiety subtypes were common in soldiers exposed to TBM blasts. The study supports "post-concussion screening that combines a subjective symptom inventory, for example, Neurobehavioral Symptom Inventory, and a performance-based ocular motor/vestibular screening examination to help identify patients who may under recognize or under report or minimize symptoms. The findings support performing the vestibular ocular motor screening on all potential acutely concussed military service members before confidently determining a concussion screen to be negative."

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Patient Testimonials

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My experience at Intrepid Spirit Center [Eglin] has been life changing. From learning about my TBIsymptoms and ways to reduce/alleviate them with the physical therapy office to processing through behavioral health challenges with music therapy, art therapy and an extremely trustworthy and effective Licensed Clinical Social Workers (LCSW).

I have one ask for anyone who reads this...I would include a focus on post-traumatic stress, just about anyone with a TBI is about guaranteed to have PTS. have benefited greatly in addressing both during my month of treatment and it is also comforting to know I have therapists I can talk to as I process through a lot of learning about ways my vestibular system was impacted by TBIs.



Staff at the Eglin ISC at the Brain Injury Awareness Manth Kick-Off this past March.

The staff at the front desk is also incredible. This is the first medical treatment facility in my 20+ year career where I felt genuinely cared for and providers explain symptoms and the "why's." Please ensure ALL ISC staff are informed of this awesome review - they are each making a HUGE difference in the lives of our injured military members! This difference doesn't only impact the AD service member, it impacts their families and communities - one small drop is generating a tidal wave.

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Intrepid Voices Individual and Team Highlights



Lt.Cmdr. Narisa Tappitake, Fort Carson Intrepid Spirit Center's Deputy Director and occupational therapist, presented a poster on Visual Symptoms and Treatment after mTBI at the American Occupational Therapy Association conference in May. We also want to congratulate Lt. Cmdr. Tappitake for her promotion to the rank of CDR with an effective date 1 JUL 2023!



Congratulations to Intrepid Spirit Center (ISC) Camp Pendleton, who commemorated their five-year anniversary on April 4th! ISC Pendleton works together with the Naval Hospital Camp Pendleton to treat traumatic brain, physical and psychological injuries.

Too bad they never have any fun over there...

Intrepid Voices Individual and Team Highlights



Congratulations to Mr. Timothy Camasta (Fort Carson Intrepid Spirit Center's physician assistant) for receiving the American Academy of Physician Association (AAPA) Military Service Award! Mr. Camasta is a subject matter expert in the evaluation and treatment of traumatic brain injury and its comorbidities, such as post-traumatic stress, headaches, sleep disorders, dizziness and balance issues, cognitive function problems, and visual disturbances.



Congratulations to Dr. George Smolinski (Medical Director) and his team including medical provider colleagues from Landstuhl Regional Medical Center, Germany – who recently earned the German "Edelweiss" Mountain Proficiency Badge!



This group earned the German Mountain Proficiency Badge by navigating using a topographical map in order to locate 34 individual grid coordinates in a variety of terrain. To earn the badge participants must cover a minimum of 3,500 feet of elevation gain and 20 miles, using a 45-pound rucksack (men) or 25-pound (women) plus water. Teams have up to 12 hours to complete the event, but it must be completed within one calendar day. Congratulations team Landstuhl!



Dr. Simge Yonter joins NICoE as Service Chief of Rehabilitation and Wellness. Dr. Yonter is a senior staff physiatrist in the Rehabilitation Medicine Department at the National Institutes of Health (NIH) Clinical Center. She earned her medical degree at the Ankara University Medical School in Ankara/Turkey. She completed ophthalmology residency at Baskent University followed by research retina fellowship at UIC Eye and Ear Infirmary. She completed her physical medicine and rehabilitation residency at Marianjoy Hospital in Chicago, Illinois. Welcome Dr. Yonter to NICoE & the Defense Intrepid Network!



Dr. Meredith McGhee joined the NICoE team recently as an audiologist. Prior to joining NICoE, Dr. McGhee worked at the Naval Submarine Base New London, conducting research on auditory and vestibular noise exposure. She received her AuD from the University of Tennessee and attended Towson University as an undergraduate. Welcome Dr. McGhee to NICoE & the Defense Intrepid Network!

NICoE's Animal Assisted Therapy Team Welcomes Two New Members!

Cathlene Holloran (University of North Georgia, B.S. in Psychological Science) focused her studies on areas of canine cognition, neuroscience, and the ways in which the human-animal bond can be utilized for healing and increased independence. Cathlene went on to become an Assistance Dogs International instructor, training and placing service dogs with adults, children, and veterans with disabilities.

Katie Keith (Penn State, B.S. in Animal Science) studied animal behavior. While attending university, she devoted her spare time to raising and training service dogs through organizations accredited by Assistance Dogs International. Through interactions with active-duty military and veterans, Katie recognized the impact dogs have on those suffering from physical and mental wounds, and the healing power of human-animal interactions.

Cathlene's and Katie's love of working with dogs in healthcare facilities led them to the Animal Assisted Therapy program at NICoE where they combine service dog training with the healing power of the human-animal bond. The team is led by Malika Rasheed (DPT), who has over 30 years of clinical experience working in a variety of settings across the U.S.

The Animal Assisted Therapy's clinical intervention model at NICoE is mission based. hands on and goal oriented to suit the specific needs of the patient. The program engages



We want to welcome our two new instructors Cathlen Holloran (left) and Katie Keith (right) to NICoE's Animal Assisted Therapy team. Malika Rasheer (center) heads the Animal Assisted Therapy program; and our four-legged friends are Papa, Abel and Wolff (from left to right)

wounded warriors in the mission of training service dogs to assist veterans with mobility and impairment issues. Patients will assist in helping a future veteran reintegrate into the community and set them up for future success with their loyal companion. The program helps to improve cognitive, behavioral, social and emotional competencies, can have a tremendous impact on regulating emotions, reducing anxiety, and improving sleep, self-confidence, communication, parenting and relationship skills. This is a unique opportunity for patients to learn some valuable skills and pay it forward.

Visitors to Our Center of Excellence!

On June 14, the NICoE welcomed the members of the Advanced Aerospace Medicine for International Military Officers (AAMIMO) course at Wright Patterson AFB, Ohio. AAMIMO is a six month course for international flight surgeons organized by the U.S. Air Force. Participants in the course are selected by their respective countries to prepare them for leadership in their country's military.

The curriculum involves a comprehensive look at Team Aerospace Medicine from Operational, Tactical, and Strategic levels with the intention of promoting partner nation capability and capacity as well as global interoperability. This was the seventh time the AAMIMO course participants visited the NICoE. They took a brief hiatus from touring the facility during the height of the COVID-19 pandemic in 2020 and 2021.

Likewise, members of the Australian Royal Commission into Defense and Veteran Suicide took a tour of the NICoE on June 15. The role of the commission is to listen, investigate and recommend actions or changes to prevent suicides among active and non-active service members and veterans. The commission was established in July 2021, but is independent of all Australian governments. The Royal Commissioners are going to release a final report by June 17, 2024.



(left to right) Mr. Paul McCracken, Training Coordinator, International Training Branch, USAF School of Aerospace Medicine; Lt Colonel (Dr.) Ra'fat Rahim Rahayfeh, Head of Aerospace Medicine for the Royal Medical Services (RMS) in Jordan Armed Forces (JAF); CAPT (Dr.) Carlos D. Williams, Director of NICoE; Lieutenant (Dr.) Vasileios Pastamentzas, Medical Officer and Flight Surgeon, Hellenic Air Force (HAF) (Greece); Col Jeff Harris, Chief, International Training Branch, USAF School of Aerospace Medicine

At the Intrepid Spirit Center at Joint Base Lewis-McChord, Creative Forces Art Therapist Angela Bossut, kicked off a new monthly event with a jazzy Creative Force in collaboration with America's First Corps Band. The multi-disciplinary event engaged art therapy patients in making art inspired by jazz performed live by the Army First Corps Band's Pacific Beat Jazz Band. Through this collaborative experience, patients explored creating lines and shapes to capture the rhythm and tone of what they heard.



EVENTS

Assistive Technology Creating Opportunities for Independence

2023 Interdisciplinary TBI Grand Rounds

Guest presenter: Melissa Oliver, MS OTR/L, Assistive Technology Program Director, Central

Virginia VA Health Care System August 30, 2023 : 1200-1300 ET (Click here to join the meeting)

Long-Term Effects of Mild TBI and Blast Exposure in Combat Veterans

2023 NICoE Education Webinar Series

Guest lecturer: Sarah L. Martindale, PhD, Research Health Scientist, W.G. (Bill) Hefner VA Health

Care System

September 13, 2023: 1400-1500 ET

(Click here to join the meeting)

The 2023 Military Health System Research Symposium

Gaylord Palms Resort and Convention Center, Kissimmee FL.

August 14-17, 2023.

Breakout Session Descriptions | MHSRS (health.mil)

Acute Concussion Care Pathway: Military Acute Concussion Evaluation 2 and Progressive Return to Activity Training

The Traumatic Brain Injury Center of Excellence

July 20, 2023: 1300-1500 ET

https://health.mil/ACCPathwayTraining

TBI Research Seminar: Quarterly Education Series

The Traumatic Brain Injury Center of Excellence

August 31, 2023: 1100-1300 ET

Link to Microsoft Teams room



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Questions/comments - dha.bethesda.j-11.mbx.nicoe-pao@health.mil

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