# INTREPID VOICES



SEPTEMBER 2023

PUBLICATION OF THE DEFENSE INTREPID NETWORK FOR TBI & BRAIN HEALTH

### Defense Intrepid Network Milestone - Intrepid Spirit Center at Fort Belvoir Celebrates 10th Anniversary



From left to right: Sharde' Randall, Research Portfolio Manager, ISC Fort Belvoir; Caitlin Jones, Clinical Research Program Manager, ISC Fort Belvoir; Lt. Cmdr. Christine Brady, Director, ISC Fort Belvoir; Brig. Gen. Deydre Teyhen, Director, National Capital Region Health Network; Kiesha Drake, Award Manager, ISC Fort Belvoir; Jim Hulbert, Director, Client Partnerships, ISC Fort Belvoir; Jesse J.K. Szeto, Senior Director of Programs, ISC Fort Belvoir; Capt. Carlos Williams, Director, National Intrepid Center of Excellence.

Photo credit - Reese Brown.

On Sept. 11, 2023, the first Intrepid Spirit Center (ISC) located at Fort Belvoir turned double digits. What started in a small hallway at the Alexander T. Augusta Military Medical Center, formerly Fort Belvoir Community Hospital (FBCH), with 16 staff members of six different health professional disciplines expanded to 44 staff and 13 disciplines. "Our first clinic was situated in one tiny hallway, and our initial estimates were that we would see maybe 400 patients a year," said Ms. Stephanie Beauregard, ISC Rehabilitation Service Chief. Within the first 14 months of opening services at FBCH, they saw over 800 new patients with a staff of only 16 medical professionals. "We far exceeded our numbers in our first year," Ms. Beauregard said. Since opening, ISC Fort Belvoir has consistently evaluated over 1,000 new patients each year.

After years of careful observation and treatment of service members diagnosed with mild traumatic brain injury (mTBI) and posttraumatic stress disorder (PTSD), the ISC team realized that the model of care must be as unique and individualized as the patients and incorporate an interdisciplinary methodology. Hence, the University Model and Five Pillars of Care were created in March 2015. This patient care model resembles traditional universities where students take a series of classes, learn new skills through therapeutic interventions with our providers, and work toward completing a "degree." It destigmatizes healthcare for patients with mTBI and PTSD, as they are now considered students, not patients. This model of care reduces variation in the overall process while creating individualized patient care. The Five Pillars of Care include physical movement, sleep, resiliency, pain management, and nutrition.

Collaboration has been a cornerstone of the ISC's success. With the establishment of the Defense Intrepid Network under the Defense Health Agency, the ISC team is looking optimistically toward the future. "I think being a program of record will facilitate standardization of services, communication, sharing of resources, and coordinating research. I'm looking forward to more cohesion as a network," said Lt. Cmdr. Christine Brady, Director of ISC Fort Belvoir.

"A decade ago, this facility was born out of an earnest desire to serve those who have given so much in service to this nation. It symbolizes more than bricks and mortar; it stands as a testament to our collective commitment to the well-being of our warriors," said Brig. Gen. Deydre Teyhen, Director of the National Capital Region Health Network, in her keynote address at the 10-year anniversary event held on Sept. 13, 2023. "From its inception, it has been a sanctuary for healing and a center of innovation."

"Our goal here is essential. It's working together; and we do that in partnership with the TBI community. We are one team. That's what DHA is all about - one team," said Capt. Carlos Williams, Director of the National Intrepid Center of Excellence in his speech at the anniversary event. In her closing remarks, Lt. Cmdr. Christine Brady said that "We stand here today, not just to celebrate our past achievements but to recommit ourselves to the future. The ISC is a living testament to our dedication to those who serve, and we will continue to pave the way in research, treatment, and care."

### The Defense Intrepid Network Showcases TBI Work at the 2023 MHSRS

Medical Readiness for the Future Fight was the theme of the 2023 Military Health System Research Symposium (MHSRS). Achieving optimal patient functioning through evidence-based, holistic care of traumatic brain injury (TBI) is one of the strategic goals for the Defense Intrepid Network (DIN) and is aligned with this year's MHSRS theme.

In line with this, the DIN showcased a wide range of studies that characterize TBI, associated physiological and behavioral health conditions and potential therapeutic interventions that are aimed at achieving medical readiness to support the warfighter. Research shared by the DIN at the symposium included studies on emerging treatments such as IT based cognitive training explorations, emerging medications in TBI management, research on sustained recovery from combat related TBI, alterations in white matter after TBI, as well as findings on factors that affect patient compliance to treatment (such as education level). The studies employed a host of tools and techniques to characterize patients and assess patient outcomes, including biomarker discovery, advanced neuroimaging modalities, and an array of cognitive and emotional assessments.

#### **Poster Presentations**

Altered Long-Range Functional Connectivity in PTSD: Low Synchronization of the Amplitude Envelopes of Beta-Band Cortical Activity. Presenter - Dr. John Hughes. Authors - Thomas DeGraba, MD, Mihai Popescu, PhD, Elena-Anda Popescu, PhD, John Hughes, MD

Association of Military Occupational Risk Blast Exposure with Serum Biomarkers in Service Members and Veterans with Traumatic Brain Injury: A Preliminary Analysis. Presenter - Dr. Katie Edwards. Authors - Katie A. Edwards, PhD, RN, Rael T. Lange, PhD, Sara M. Lippa, PhD, Tracey A. Brickell, DPsych, Jason Bailie, PhD, Stephanie Sloley, PhD, Jessica M. Gill, PhD, RN, FAAN, Louis M. French, PsyD

Brain White Matter Alterations in Military Service Members After a Remote Mild Traumatic Brain Injury. Presenter - Dr. Ping-Hong Yeh. Authors - Ping-Hong Yeh, PhD, Chihwa Song, PhD, Rujirutana Srikanchana, PhD, Cheng Guan Koay, Wei Liu, PhD, Grant Bonavia, MD, John Ollinger, PhD

Comparative Performance of Three Eye-Tracking Devices in Detection of Mild Traumatic Brain Injury (mTBI) in Acute Versus Chronic Subject Populations. Presenter - Dr. John King. Authors - John King, PhD, Victoria Ingram, PhD, Jacques Arrieux, MA, Louis French, PsyD, Walter Carr, PhD

Comparing Self-Reported Cognitive Symptom Changes of Service Members with Mild Traumatic Brain Injury after Participation in a Computer-Based Cognitive Training Platform. Presenters - Ms. Melinda Tung. Authors - Melinda Tung, MS, Peter Hoover, MS, Megan Tsui, BS, Jose Lara-Ruiz, PhD, Katherine W. Sullivan, PhD, Wendy A. Law, PhD, Louis M. French, PsyD

Description of the National Intrepid Center of Excellence Traumatic Brain Injury History Assessment Process. Presenters - Dr. Treven Pickett/Dr. Chandler Rhodes. Authors - Amy Conrad, PhD, Cora Davis, BS, Louis M. French, PsyD, Erika Gray, MS (2LT), Sarah Kruger, MS, Tamara McKenzie-Hartman, PhD, John Ollinger, PhD, Wendy Pettit, NP, Kerry Rosen, PhD, Rebecca Sandlain, BS, Kayleigh Scott, BA, Chandler Sours Rhodes, PhD, Theresa Teslovich, PhD, Helena Wu, BA, Treven Pickett, PsyD

Evaluation of Effects of Centrally-Acting Medicines and Caffeine on Vestibular Assessment Results in Patients with Mild Traumatic Brain Injury and Concurrent Behavioral Health Involvement. Authors - Dr. John King. Authors - John King, PhD, Marcy Pape, DPT, Paula Kodosky, DPT

An Evaluation of Headache Treatment and Clinical Improvement among Service Members at Outpatient Traumatic Brain Injury Clinics within the Military Health System. Presenter - Melinda Tung, MS. Authors - Melinda Tung, MS, Peter Hoover, MS, Rachel Sayko Adams, PhD, Emily Scarlett, Lisa H Lu, Amy O Bowles, Jesus Caban, PhD

## The Defense Intrepid Network's Poster and Oral Presentations at the 2023 MHSRS

#### Poster Presentation ... continued

Examining Alexithymia as a Predictor of Psychological Health and as a Treatment Target for Improving Outcomes in Veterans, Service Members, and Civilians with Traumatic Brain Injury. Presenters - Dr. Dawn Neumann. Authors - Dawn Neumann, PhD, Flora Hammond, MD, Jacob Finn, Angelle Sander, PhD, Joyce Chung, MD, Daniel Kylce, PhD, Tamara Bushnik, PhD, Jenny Bogner, PhD, Mitch Sevigny, MS, Jessica Ketchum, PhD, Devan Parrott, MS, PhD, Treven Pickett, PsyD, and Louis M. French, PsyD

Examining Clinical Improvement on the Neurobehavioral Symptom Inventory among Service Members Treated for Mild Traumatic Brain Injury in the MHS. Presenter - Ms. Melinda Tung. Authors - Melinda Tung, MS, Peter Hoover, MS, Rachel Sayko Adams, PhD, Emily Scarlett, Lisa H Lu, Amy O Bowles, Jesus Caban, PhD.

Impact of Education Levels on Patient Compliance: Characteristics of Service Members with Traumatic Brain Injury at a Cognitive Rehabilitation Center. Presenter - Mrs. Megan Tsui. Authors - Megan Tsui, BS, Peter Hoover, MS, Jose Lara-Ruiz, PhD, Melinda Tung, MS, Isabelle Wal, BS, Katherine Sullivan, PhD, Wendy Law, PhD, Louis M. French, PsyD

Interdisciplinary Care Associated with Sustained Recovery of Combat and Mission Related TBI and Behavioral Health Conditions. Presenter - CPT Benitez-McCrary. Authors - Thomas DeGraba, MD, Kathy Williams, MS, Mercedes Benitez-McCrary, PhD, Chandler Rhodes, PhD, Treven Pickett, PsyD

Lifetime Blast Exposure is not Associated with White Matter Integrity in U.S. Service Members and Veterans with and without Mild Traumatic Brain Injury. Presenter - Dr. Ping-Hong Yeh. Authors - Sara M. Lippa, PhD, Ping-Hong Yeh, PhD, Jason Bailie, PhD, Jan Kennedy, PhD, John Ollinger, PhD, Tracey A. Brickell, DPsych, Louis M. French, PsyD, & Rael T. Lange, PhD

Predictors of psychological health issues in military service members and civilians following mTBI: A T-REV Study. Presenter - Dr. Anthony Kontos. Authors - Anthony P. Kontos, PhD, Michael W. Collins, PhD, Clair N. Smith, Susan L. Whitney, PhD, PT, Joseph M. Furman, MD, PhD, Anne Mucha, DPT, Charity G. Patterson, PhD, Jamie N. Hershaw, PhD, Candace A. Pearson, Selena A. Bobula, DPT, Patrick J. Sparto, PhD PT

The Relationship Between Migraine Headache Symptoms and Visual Vertigo in Military Service Members and Civilians with mTBI: A T-REV Preliminary Study. Presenter - Dr. Susan Whitney. Authors – Susan L. Whitney, PhD, PT, Patrick J. Sparto , PhD PT, Clair N. Smith, Michae, W. Collins, PhD, Joseph M. Furman, MD, PhD, Anne Mucha, DPT, Charity G. Patterson, PhD, Jamie N. Hershaw, PhD, Candace A. Pearson, Selena A. Bobula, DPT, Anthony P. Kontos, PhD

Risk Factors for the Presence and Persistence of Post-traumatic Stress Symptoms Following Traumatic Brain Injury and Polytrauma in U.S. Service Members and Veterans: A Cross-sectional and Longitudinal Study. Presenters - Dr. Rael Lange. Authors - Rael T. Lange, PhD, Louis M. French, PsyD, Sara M. Lippa, PhD, Samantha M. Baschenis, MA, Kelly C. Gillow, MA, Megan E. Glazer, MA, Alicia A. Rogers, MA, Kendal E. Cristaudo, MA, Jason M. Bailie, PhD, Lars Hungerford, PhD, Jan Kennedy, PhD, and Tracey A. Brickell, DPsych

Sex Differences in Early/Unplanned Separation among US Service Members with a History of Mild Traumatic Brain Injury. Presenter -Ms. Isabelle Wal. Authors - Isabelle Wal, MPH, Peter Eng, MS, Rachel Sayko Adams, PhD, MPH, Jeri E. Forster, PhD, Jesus Caban, PhD, Mary B. Engler, PhD

Sub-acute Serum Tau, NFL, GFAP and UHCL-1 Concentrations are Associated with the Deterioration of Neurobehavioral Symptoms into the Chronic Phase of Recovery following Traumatic Brain Injury: A Longitudinal Study. Presenter - Dr. Louis M. French. Authors - Louis M. French, PsyD, Sara M. Lippa, PhD, Tracey A. Brickell, DPsych, Jessica Gill, PhD, RN, FAAN, Rael T. Lange, PhDb

Test-retest Reliability of the Brain Gauge and its Impact on Assessing Recovery Following Acute Mild Traumatic Brain Injury in US Military Service Members. Presenter - Mr. Brian Ivins. Authors - Brian J. Ivins, MPS, Jacques P. Arrieux, MA, Joanna Pascal, PsyD, Wesley R. Cole, PhD

Unhealthy Family Functioning is Strongly Associated with Warfighter Brain Health Following Mild Traumatic Brain Injury in U.S. Service Members and Veterans. Presenter - Dr. Tracey A. Brickell. Authors - Tracey A. Brickell, DPsych, Louis M. French, PsyD, Sara M. Lippa, PhD, Megan M. Wright, Samantha M. Baschenis, Lars Hungerford, PhD, Rael T. Lange, PhD

### In Pictures - The Defense Intrepid Network at the 2023 MHSRS



Members of the Defense Intrepid Network at the 2023 MHSRS

Dr. Ping-Hong Yeh presenting research on brain white matter alterations in military service members after a remote mild traumatic brain injury.

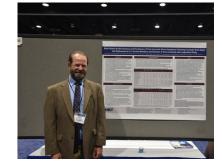


Capt. Mercedes Benitez McCrary presented on interdisciplinary care associated with sustained symptom reduction after military TBI and behavioral health conditions From left to right: Dr. Johnson, Dr. Sakai, Dr. Reed and Dr. Engel from Fort Cavazos.

**\_\_\_** 



Dr. Chandler Rhodes and Dr. Andy Srikanchana from NICoE

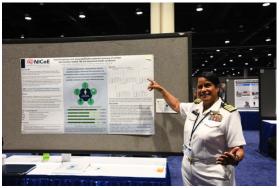




The NICoE PMO team - from left to right - Ms. Giselle Vazquez-Soto, Mr. Jonathan Ward, Ms. Brianna Davis, Mr. Elizabeth Maquera and Dr. Jacob Powell



Dr. Louis French, NICoE Deputy Director, presented a longitudinal study on neurobehavioral symptoms in the chronic phase of recovery following TBI



**NICoE** 

### The Legacy of 9/11 on TBI Care



Sept. 11 marked 22 years since the 9/11 terror attacks. 2.7 million service members were deployed during Operation Enduring Freedom, Operation Iraqi Freedom, and Operation New Dawn. Improvised explosive devices (IEDs), used extensively against U.S. forces in Operation Enduring Freedom and Operation Iraqi Freedom, have been one of the leading causes of death and injury. TBI, a frequent consequence of these IED blasts, has been referred to as the signature wound of US warfighters in Afghanistan and Iraq.

According to data from the Traumatic Brain Injury Center of Excellence, over 470,000 service members were diagnosed with TBI from 2000 to 2022. And according to the Department of Veteran Affairs, approximately 10% to 15% of veterans of Operation Enduring Freedom and Operation Iraqi Freedom have sustained at least one incidence of TBI during their deployment—with significant percentage reporting persistent, post-concussive symptoms, even many years post-injury.

It's no doubt that the military health care system has evolved to meet the unique needs of service members recovering from TBI; and the holistic and interdisciplinary care provided by sites in the Defense Intrepid Network is one testament of how far TBI care has come. Evaluations and treatments provided across the network, with short term treatment plans that are backed with cutting edge technology and research, significantly increase the service members' ability to regain their physiological and psychological capabilities and return to active duty.

As we remember our fallen heroes on 9/11, we take stock of how far TBI treatment has come in the past two decades and re-commit ourselves to continue providing care for our service members and their families through collaborations in clinical care, research, and education.

### Study Shows Art Therapy as a Promising Intervention for Posttraumatic Stress Symptoms

Art therapy enables individuals to develop a "visual voice", using imagery, symbolism, and metaphor to externalize emotions and experiences that they may not be able to express in words.

#### Highlights of the study

- Art therapy is a promising intervention for posttraumatic stress symptoms.
- 35% of service members depicted closure and healing within their art therapy masks.
- Service members depicting closure had higher functional connectivity between brain regions associated with pain, attention, and memory.

The National Intrepid Center of Excellence (NICoE) researchers and art therapists in collaboration with academic partners at George Washington University, and the University of Pennsylvania, published a recent study in the peer-reviewed journal, Arts in Psychotherapy.

The study investigated associations between themes present in art therapy masks and neuroimaging measures collected from resting state functional magnetic resonance imaging (fMRI). This retrospective analysis used data from 113 service members who attended the NICoE Intensive Outpatient Program (IOP) and participated in art therapy as well as advanced neuroimaging. Masks that were created during the art therapy program were coded by art therapists for a number of themes including closure and healing. Closure involves a process of understanding an experience, accepting it, and developing a feeling of psychological completion.

Researchers found that service members whose masks depicted closure and healing had higher functional connectivity between brain regions associated with pain, attention, and memory when compared to service members whose masks did not represent healing.



Please see the article (subscription required) Increased functional connectivity in military service members presenting a psychological closure and healing theme in art therapy masks - ScienceDirect

For further information, please refer to the Psychology Today blog posted by collaborator, Dr. Anjan Chatterjee. <u>The Brain and Art Therapy for Post-Traumatic</u> <u>Stress Symptoms | Psychology Today</u>

This study was supported by the Creative Forces®: National Endowment for the Arts Military Healing Arts Network

\*\*Authors Janell Payano Sosa, Rujirutana Srikanchana, Melissa Walker, Adrienne Stamper, Juliet L King, John Ollinger, Grant Bonavia, Clifford Workman, Kohinoor Darda, Anjan Chatterjee, and Chandler Sours Rhodes.

### Study Shows Depression Associated with Higher Pain Intensity



The Brazilian Journal of Physical Therapy, the official publication of the Brazilian Society of Physical Therapy Research and Graduate Studies, recently published a study\* that found that depression was the only pain-related comorbidity associated with greater pain intensity.

Musculoskeletal pain (MSP) is the largest contributor to chronic pain and frequently occurs alongside other medical comorbidities. The purpose of this study was to determine which pain-related comorbidities were associated with pain intensity and pain-related psychological distress in patients with MSP. "Comorbidities, such as anxiety, metabolic disorder, chronic pain, depression, nicotine dependence, post-traumatic stress disorder (PTSD), and sleep disorders, have all been shown to influence the individual pain experience, patient outcomes, and overall healthcare utilization," the study states.

The study consisted of 532 participants ranging from 18-90 years old in the midwestern United States who completed a longitudinal assessment when beginning a new episode of physical therapy for MSP. Comorbid depression and spine versus lower extremity pain, and prior surgery were associated with higher pain intensity scores. "We retrospectively looked back 12 months from the date of physical therapy examination for a new musculoskeletal complaint in 532 patients to identify comorbidities that influenced the pain intensity and level of psychological distress [patients reported in a civilian hospital system]. We incorporated diagnoses previously identified in extensive reviews of military health data. Our results supported previous literature showing a diagnosis of depression did increase the pain intensity level. None of the pain-related comorbidities were associated with painrelated psychological distress," said Cmdr. Spoonemore, lead author of the study. "We were limited in capturing ICD10\*\* diagnostic codes in the medical record, so it's unclear if the severity of the comorbidity may impact pain intensity," he added.



Cmdr. Steven Spoonemore

\*Steven L. Spoonemore Jr (DPT, DSc, OCS - Intrepid Spirit Center Fort Carson), Ryan C. McConnell, William E. Owen, Jodi L. Young, Derek J. Clewley, Daniel I. Rhon

\*\* 10th revision of the International Statistical Classification of Diseases and Related Health Problems (ICD), a medical classification list by the World Health Organization.

<u>See full article - Brazilian Journal of Physical Therapy</u> <u>ScienceDirect.com by Elsevier</u>

### **Intrepid Team Highlights**



Capt. Melissa Austin, MD, Director of Walter Reed National Military Medical Center (WRNMMC), visited the National Intrepid Center of Excellence (NICoE) on July 18. Capt. Austin toured the diagnostic, clinical and therapeutic departments of NICoE and met with staff.

Capt. Austin took the directorship of WRNMMC on July 5. Before that, Capt. Austin served as Commanding Officer of Navy Medicine Readiness and Training Command, Fort Belvoir, Virginia. "To whom much is given, much is required. That's why my goal is that each of you have the same passion, purpose, and pride for military medical service that I do," Capt. Austin said in a speech after the change of directorship ceremony at Walter Reed.

NICoE Director, Capt. Carlos Williams gives an overview of the NICoE programs to Capt. Austin.



Astronauts tour Eglin ISC: Col. Raja Chari (from Space Force, USAF) and Lt. Col. Robert (Bob) Hines (NASA Research Pilot) toured the Eglin Intrepid Spirit Center on April 12. Col. Chari was Spacecraft Commander on SpaceX Crew-3 (Expedition 66 in November 2021); Lt. Col. Hines was a pilot on SpaceX Crew-4 (Expedition 67 in April 2022).

Col. Raja Chari (from Space Force, USAF, center left) and Lt. Col. Robert Hines (NASA Research Pilot, center right) tour Eglin ISC.



Chief Master Sgt. of the U.S. Air Force, JoAnne Bass toured the Eglin Intrepid Spirit Center on May 22, and met with staff and patients. CMSAF Bass serves as the personal adviser to the Chief of Staff and the Secretary of the Air Force on all issues regarding the welfare, readiness, morale, and proper utilization and progress of more than 600,000 Total Force Airmen. Chief Bass is the 19th Chief Master Sgt. appointed to the highest non-commissioned officer position.

Dr. J. Lucas Koberda, MD (Neurologist, right) provides brain mapping overview to CMSAF Bass (left) during her Eglin ISC tour.



Eglin's Intrepid Spirit Center wins the Operational Medical Readiness Squadron's Large Team of the Quarter award.

### **Intrepid Spotlights**

### A Chat with our Music Therapy Intern



Name: Bekah Baldwin

What do you do at NICOE? I am here as an intern, to earn experience and knowledge and continue working toward music therapy certification. In the music therapy studio, we leverage the benefits of music toward patient health outcomes, such as relaxation, expression, processing trauma, supporting cognition and memory work, and so on. **Interesting facts about your career:** Music therapy is a second career for me; I began in private studio music teaching. I came to NICoE to learn about music therapy, while also giving back to my own [military] community.

What do you find rewarding working at NICoE? As a military spouse, the best part of being at NICoE for me is the ability to be a part of a positive change for such amazing and humble people, with whom I share a lifestyle and calling.

What is something people don't know about you? I love to cook/bake, and my professional dream is to work on a synthesis music therapy and culinary art therapy in community settings.

Name three adjectives that describe you: Passionate, extroverted, unapologetically nerdy.

### JBLM's Paul J. Savage, MD, Celebrates 40 years of Service in Federal Government



Dr. Paul Savage has been treating service members with persistent symptoms associated with traumatic brain injury (TBI) at the Joint Base Lewis McChord (JBLM) Intrepid Spirit Center since the founding of the TBI service line in 2007. After a 20-year career, he retired as a Navy Medical Corps Officer and internal medicine physician in 2008 but continued working as a civilian care provider for the next 15 years. It is his passion and joy to treat the countless service members impacted by trauma and related military exposures to improve the well-being of service members and their families.

Dr. Savage is currently the Site Principal Investigator on a randomized control pilot trial of prazosin for prophylaxis of posttraumatic headaches. He was recognized for this study at the Defense Intrepid Network Research Symposium in 2021 and received the award for the Best Lightening Talk presented at the National Intrepid Center of Excellence.

In March 2023, Dr. Savage was accepted as a podium presenter for JBLM's Brain Injury Awareness Month Conference on the topic of Assessment and Management of Sleep Disorders. This was his second year in a row as a podium presenter. Congratulations Dr. Savage for your contribution!

### **Patient Testimonials**

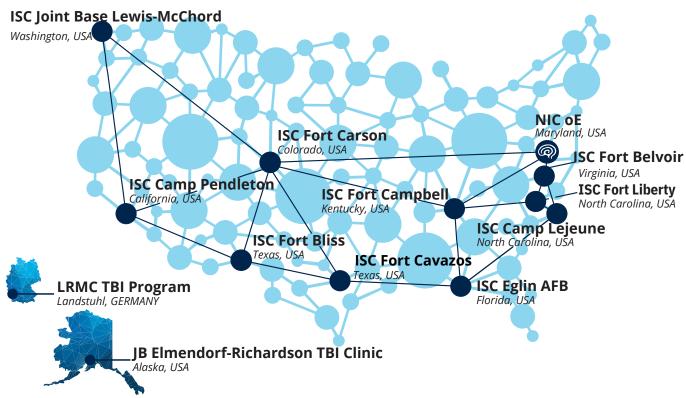
"I have been going to the Intrepid Spirit Center [Fort Carson] for the last three months for various appointments. PA Camasta [Timothy Camasta], Tim [Timothy McArthur] and John [John Butera] in the Physical Therapy section have all been fantastic. They have helped me with my medical issues and truly cared about developing a plan for treatment. They set goals at the beginning, and we developed a plan together to get me to those goals. The front desk receptionists are always happy and pleasant. It only took them two times of me coming to the center for them to start recognizing me and I thought that was truly great. Everyone in that center are some of the best medical providers I have seen in 21 years of service and they should be thanked by our community for the outstanding service they are providing to our service members!"

- Timothy Camasta, Physician Assistant, Intrepid Spirit Center Fort Carson
- Timothy McArthur, Physical Therapist, Intrepid Spirit Center Fort Carson
- John Butera, Physical Therapy Assistant, Intrepid Spirit Center Fort Carson

In April, the Eglin Intrepid Spirit Center (ISC) opened its new Intensive Outpatient Program, also referred to as the TIDE (TBI Intensive Developmental Education). The following is a comment from a patient from the first cohort.

"Cautious would be accurate to describe my expectation of treatment. However, after a total of four weeks spent with the ISC providers, transformed is how I will relate this treatment to prospective patients. Of the treatments received I'd like to recognize the value of music and art therapists [Meire Palmer & Kevin D'Augustine]. Their approach to integrating the work being done with other providers in what felt like an organic transfer of lessons learned in both medical and psychological therapy into their treatment rooms was phenomenal. In essence, the treatment done medically allowed for healing through the arts. Each provider was professional and was exceptional in their application. What really stood out was their ability to work as a Team creating an environment where the patient could realize significant improvement in a relatively short period."

### Defense Intrepid Network for TBI and Brain Health



#### **ISC CAMP LEJEUNE**

*Director: Lt. Cmdr. Jessica Forde* 180 Hospital Corps Blvd. Camp Lejeune, NC 28547 (910) 449-1100

#### **ISC FORT BELVOIR**

Director: Lt. Cmdr. Christine Brady 5980 9th Street, Bldg 1259 Fort Belvoir, VA 22060 (571) 231-1210

#### **ISC FORT CAMPBELL**

Director: Mr. Terry James 2403 Indiana Ave Fort Campbell, KY 42223 (270) 412-5114 / (270) 412-5485

#### ISC JOINT BASE LEWIS-MCCHORD

Director: Dr. Rachel Satter 90390 Gardner Loop Tacoma, WA 98431-1100 (253) 968-9002

#### **ISC CAMP PENDLETON**

Director: Cmdr. Jeffrey Bullock 2016 Jacinto Road, Bldg 2169 Oceanside, CA 92055 (760) 763-9384

#### **ISC FORT BLISS**

Director: Dr. Sean Sebesta 5005 N. Piedras St. El Paso, TX 79930 (915) 742-4517 / (915) 742-6007

#### **ISC FORT CARSON**

*Director: Cmdr. Selena Bobula* Sutherland Circle, Bldg 7488/7489 Fort Carson, CO 80913 (719) 524-5217 / (719) 524-5218

#### JOINT BASE ELMENDORF-RICHARDSON TBI CLINIC

Director: Maj. Earl Banning Building 5955, Lynx Wing, First Floor JBER-Richardson, AK 99506 (907) 580-0014

#### **ISC EGLIN AFB**

Director: Maj. Cade Reedy 1 Ash Drive Eglin Air Force Base, FL 32542 (850) 883-9484

#### **ISC FORT LIBERTY**

Director: Capt. Scott Klimp 3908 Longstreet Rd Fort Bragg, NC 28310 (910) 907-7777

#### **ISC FORT CAVAZOS**

Director: Dr. Scot Engel 36029 58th St. Fort Hood, TX 76544 (254) 287-8179

### LANDSTUHL REGIONAL MEDICAL CENTER TBI PROGRAM

Director: Dr. George Smolinksi Bldg. 3737 Dr. Hitzelberger Strasse Landstuhl, GERMANY 66849 06371-9464-5601

#### NATIONAL INTREPID CENTER OF EXCELLENCE -Headquarters of the Defense Intrepid Network

#### **Director: Capt. Carlos Williams**

4860 South Palmer Road | Bethesda, MD 20889 | (301) 319-3600 email: dha.bethesda.Walter-Reed-Med-Ctr.mbx.nicoe-pao@health.mil The identification of specific products or scientific instrumentation is considered an integral part of the scientific endeavor and does not constitute endorsement or implied endorsement on the part of the author(s), DoD or any component agency. The views expressed in this newsletter are those of the authors and do not necessarily reflect the official policy of the Department of Defense or the U.S. Government.