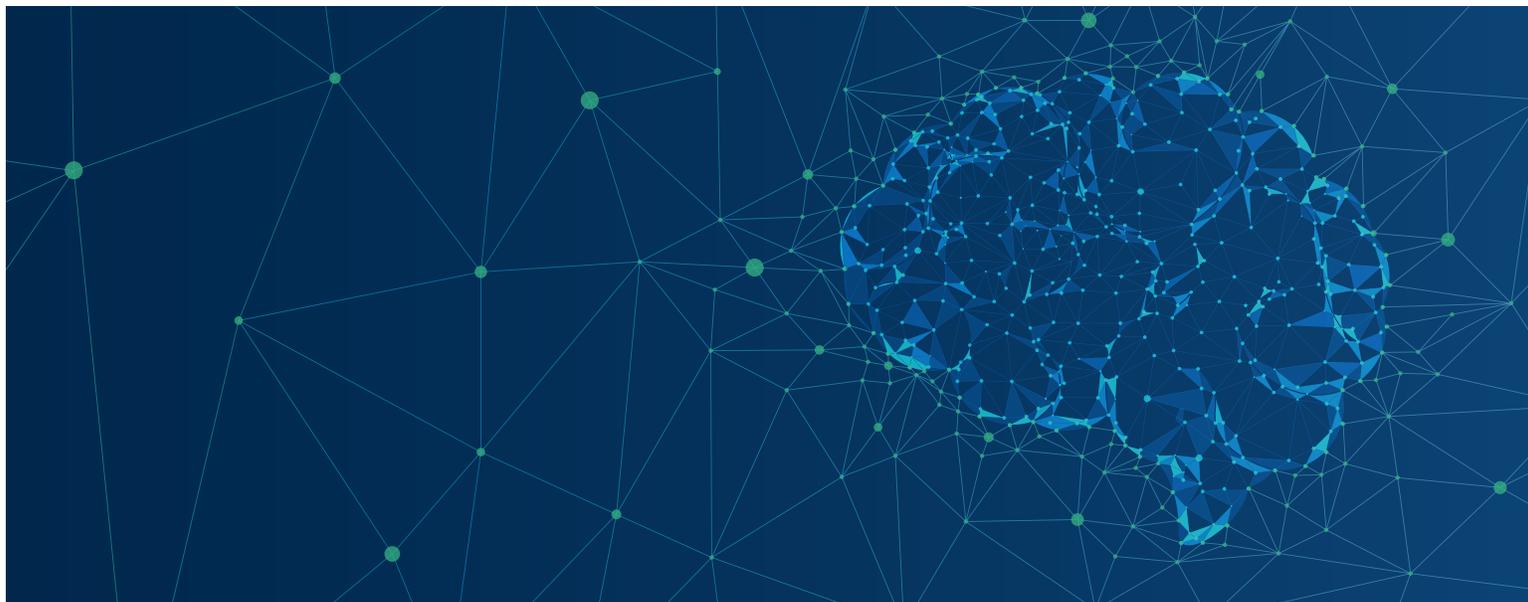


# INTREPID VOICES

Newsletter | March 2022 | Publication of the Defense Intrepid Network for TBI & Brain Health

## MARCH IS BRAIN INJURY AWARENESS MONTH



### Educational Opportunities in March

**THU 3** *Spotlight on Intrepid Spirit: Concussion Recovery Center Camp Lejeune.* TBICoE event, 11 a.m.–noon.

**FRI 4** *Research in Art Therapy at the National Intrepid Center of Excellence.* NICoE Education Webinar with Dr. Chandler Rhodes, 7:30–8:30 a.m.

**MON 14** *Nutrition Therapy after Brain Injury.* NICoE Education Webinar with Ruth Clark, noon–1 p.m.

**THU 17** *TBICoE TBI Headache Clinical Recommendation.* Panel discussion, 3–4 p.m.

**THU 3** *Updates From the Field,* with NICoE Deputy Director Dr. Louis French and TBICoE Director Capt. Scott Cota. 1–3 p.m.

**WED 9** *Better Together: Evidence-based Practice Management of Cognitive Group Therapy.* NICoE Education Webinar with Shannon Auxier and Hana Lewis, 1–2 p.m.

**WED 16** *TBI-Related Sleep Issues, Research, and Resources.* TBICoE event, 11 a.m.–12:30 p.m.

**FRI 18** *The Autonomic Nervous System after Mild Traumatic Brain Injury.* NICoE Education Webinar with Dr. Glen Cook, 7:30–8:30 a.m.

**MON 21** *VA Caregiver Support Program & TBICoE Resources for Caregivers.* Joint event, 3–4 p.m.

**24 / 25** *ISC Joint Base Lewis-McChord BIAM Conference 2022.* Virtual sessions on TBI-related headaches, dementia, dizziness, and more.

**TUE 29** *Embodied TBI Care: Dance/Movement Therapy Across the DoD and VA.* NICoE Education Webinar with multiple providers, noon–1 p.m.

Are you ready for **Brain Injury Awareness Month (BIAM)**? Here are some ways to participate.

- Check out [health.mil](https://www.health.mil) for more virtual TBI events and resources, including full URLs for events listed here.
- Follow the The National Intrepid Center of Excellence (NICoE) on [LinkedIn](#), [Facebook](#), and [Twitter](#) for news and information on TBI.
- Listen to “Picking Your Brain” [podcasts](#) from TBICoE.

Eastern Time is listed for all events.

# Food for Thought: Nutrition and Brain Health

Research has shown that dietary changes may help relieve symptoms often associated with TBI, such as chronic pain, anxiety, depression, and sleep problems. At some Intrepid Network sites, individualized nutrition plans are part of the treatment.

The NiCoE and ISC Fort Belvoir have registered dietitians who also happen to be military veterans. This common ground makes it easier to build rapport with patients, said Belvoir nutritionist Isa Kujawski.

During the NiCoE intensive outpatient program (IOP), dietitian Ruth Clark teaches group nutrition classes and sees patients individually to create personalized meal plans. “I focus on ways to optimize nutrition in order to maximize healing potential,” she said. Both dietitians counsel patients on the benefits of an anti-inflammatory diet, in part because TBI can cause brain inflammation.

“Inflammation is one of the first things I educate patients on,” said Kujawski. “It’s the body’s defense mechanism but can cause damage over time. That’s why adopting an anti-inflammatory diet is so important, especially for brain health.” Anti-inflammatory foods may include fatty fish, whole grains, legumes, and colorful vegetables and fruits. Processed, packaged or fried foods should be avoided as they may promote inflammation.

Many patients come in with what Clark considers overly restrictive diets, limiting both what to eat and how often. She stresses the importance of meal patterns for improved cognition. “Eating more frequently throughout the day gives the brain a steadier source of energy,” she said. She also explains how correcting nutritional deficiencies can improve a variety of symptoms, including problems with sleep quality or quantity.

“Sleep is 10 times more effective [for overall health] than any sexy supplement I can give you,” said Kujawski. Her approach is less about being on a diet and more about using food as medicine. The first step: testing micronutrient levels, especially folate and vitamins D, B6, and B12. Most of her patients have a Vitamin D deficiency, which can be associated with depression, fatigue, and anxiety.

Many also have gastrointestinal symptoms when they return from deployment. Causes are varied and hard to pinpoint, but several studies have confirmed a link between TBI and gut issues. For Kujawski, this makes sense.

“The gut and brain are connected. About 90% of serotonin is made in the gut,” said Kujawski. “The state of your brain can affect the state of your digestion.”

One Belvoir ISC patient found relief by switching from a meat-heavy, high-carb diet to a plant-based one. In an email to Kujawski months after his treatment ended, he wrote: “All of my abdominal inflammation has disappeared ... [along with] the massive cramping and abdominal pain I have had for years.”



ISC Fort Belvoir Nutritionist Isa Kujawski



NiCoE Nutritionist Ruth Clark

## TIPS FOR REDUCING INFLAMMATION

- 1. Use more herbs and spices.** Paprika, rosemary, ginger, cloves, and cinnamon are among many that have been shown to reduce inflammation.
- 2. Choose plant-based proteins.** Animal-based proteins have inflammatory properties.
- 3. Eat the rainbow.** Fruits and vegetables in darker colors tend to be more anti-inflammatory.
- 4. Include more salmon and tuna in your diet.** They are good sources of Omega 3, an essential fatty acid that can also be found in whole grains, walnuts, and green leafy vegetables.
- 5. Eat dark chocolate that is at least 70% cocoa.** Studies show that 1.5 ounces a day decreases inflammation.

More on the anti-inflammatory diet may be found in the VA’s [“Eating to Reduce Inflammation.”](#)

# Meet the New Intrepid Network Leaders

*Directors New to their Role or to the Network*



**CMDR. JEFFREY D. BULLOCK, USPHS**  
***Director, Intrepid Spirit Center, Naval Hospital  
Camp Pendleton, Oceanside, California***

In October 2021, Cmdr. Bullock transitioned from acting director to director of Camp Pendleton ISC.

Cmdr. Bullock, who has an MBA, is a doctor of physical therapy (DPT). Before coming to Camp Pendleton in 2019, he served with the Indian Health Service as head of the Northern Navajo Medical Center's Physical Rehabilitation Department in Shiprock, New Mexico.



**COL. LAURA LEWIS, USAF**  
***Director, Intrepid Spirit Center  
Eglin Air Force Base, Florida***

Since October 2021, Col. Lewis has directed the Air Force's only interdisciplinary treatment center for TBI and post-traumatic stress. She oversees the strategic and daily operations of ISC Eglin. As a Master Clinician, she mentors Eglin's health care professionals. Col. Lewis is a licensed, board-certified Advanced Practice Registered Nurse (APRN) specializing in psychiatric mental health care.



**GEORGE SMOLINSKI, MD**  
***Director, Landstuhl Regional Medical Center  
(LRMC) TBI Program, Landstuhl, Germany***

Dr. Smolinski's TBI Program, part of the largest American MTF outside the U.S., recently became the only Intrepid Network site in that category. Before becoming director in March 2020, he served as LRMC's department chief of neurorehabilitation. He is a colonel in the U.S. Army Reserves and board-certified in both Electrodiagnostic Medicine and Physical Medicine and Rehabilitation.



**MAJ. ELIZABETH M. TRAHAN, USAF, BSC**  
***Director, Traumatic Brain Injury Clinic, Joint Base  
Elmendorf-Richardson (JBER), Anchorage, Alaska***

JBER is new to the Intrepid Network, but Maj. Trahan is not new to JBER; she has been the director of its TBI clinic since August 2019. Her team provides neuropsychological services to all service branches across Alaska. Maj. Trahan, a clinical neuropsychologist, oversees all clinic operations, including acute concussion care, an intensive outpatient program, and outpatient services available to 150,000 beneficiaries.

# Intrepid Network Moves Toward Formalization

Last September, during the Defense Intrepid Network for TBI and Brain Health Fall Meeting, Defense Health Agency (DHA) Director Lt. Gen. Ronald Place charged leaders of the NICoE and the Intrepid Spirit Centers with the task of making the Intrepid Network a program of record. Since then, those leaders have been working closely with community stakeholders and subject matter experts across the DHA to prepare for the transition.

Under the new framework, the Intrepid Network's reach and access will expand to 12 DHA markets, including two OCONUS sites: Joint Base Elmendorf-Richardson TBI Clinic in Anchorage, Alaska, and Landstuhl Regional Medical Center TBI Program in Landstuhl, Germany.

It will also standardize the Intrepid Network's holistic, patient-centered interdisciplinary model of treatment, ensuring a more consistent uniformity of clinical care and increasing access for more beneficiaries. In addition, the new structure will enable and foster greater collaboration with partners in the MHS, across inter-agencies, and beyond, as well as creating more opportunities for multi-site research and educational initiatives.

Moving this initiative forward requires refining key documentation and will formally establish the Intrepid Network's governance structure under DHA leadership. On target to be completed this fall, the transition to program of record status will position the Network to better address the full continuum of service members' brain health, from active-duty TBI prevention to resiliency during the ultimate transition to civilian life.



Last fall, DHA Director Lt. Gen. Ronald Place tasked Intrepid Network leaders with becoming a program of record.

Since 2010, Intrepid Network sites have been improving the lives of patients and family members affected by the invisible wounds of war. Uniting under DHA leadership as a program of record ensures that this life-changing care will be sustainable, consistent, and more available to beneficiaries.

## Network News

### PROGRAMS RETURN TO ISC FORT BELVIOR

In 2021, two popular non-virtual programs returned to ISC Fort Belvoir after a pandemic pause. The **Equine Movement Therapy** program ran from April through November, and in October, the first in-person **Creative Arts Café** in 19 months featured songs, poetry, and visual art from both patients and staff.

### NICoE LEADERS HONORED

**Dr. Jesus Caban**, Clinical and Research Informatics Chief at the National Intrepid Center of Excellence (NICoE), was **named one of 2021's FedHealthIT100**. This annual award recognizes 100 individuals, nominated and chosen by their peers, who are driving change and advancement in federal health information technology and consulting. Congratulations, Dr. Caban!

**Navy Capt. (Dr.) Carlos Williams**, the NICoE's first Black director, was the keynote speaker for the opening of Walter Reed National Military Medical Center's Black History Heritage Trail. Williams' story is showcased at one of the stops on the trail, which was put together by the MTF's Arts in Health Program, the Darnall Medical Library, and the Diversity, Equity, and Inclusion Council.



Staff at ISC Eglin gather around a new plaque gifted by the base's Advanced Explosive Ordnance Disposal Training Center.

### ISC EGLIN RECEIVES UNIQUE GIFT

On January 5, staff at ISC Eglin received an unusual thank-you note: a plaque created with explosives, courtesy of the **Advanced Explosive Ordnance Disposal (EOD) Training Center** at Eglin's Naval School Explosive Ordnance Disposal (NAVSCOLEOD). Explosive engraving, a technique involving sheet explosive and engraved acrylic, is often used in the EOD community to recognize excellence or commemorate achievements.

## Network News (cont.)



Col. Casstevens (left) presented awards to Master Sgt. Brunzman (right) and others at ISC Eglin in February.

### FOURTH QUARTER AWARDS AT ISC EGLIN

**Col. Elizabeth Casstevens**, commander of the Operational Medical Readiness Squadron (OMRS), presented fourth-quarter staff awards at **ISC Eglin** on February 2. Congratulations to **Master Sgt. Lauren Brunzman**, Senior Non-Commissioned Officer (SNCO) of the Quarter, and **April Herring**, Civilian (Category II) of the Quarter. **Dr. Micah Price**, who recently completed a leadership course, was also recognized.



At Fort Carson, the distinctive Intrepid Spirit entryway (left) and curtain wall are taking shape.

### ISC FORT CARSON MAKES PROGRESS

Progress continues on the new 25,000-square-foot **ISC Fort Carson**, which broke ground in May 2021. This ninth ISC building, part of Evans Army Community Hospital, may be open as early as June 2022 to treat service members throughout the Pikes Peak region of Colorado.



New members of the NICoE's animal assisted therapy team include (from left) Malika Rasheed; Frannie, a 5-month old Labrador retriever from Gaithersburg, Maryland; and Kristina Frick.

### NEW FACES IN NICoE's ANIMAL ASSISTED THERAPY PROGRAM

After a long COVID hiatus, the **NICoE's animal assisted therapy** is back and better than ever! Three new members joined the team in January, including Frannie, a 5-month old Labrador retriever; Malika Rasheed, doctor of physical therapy (DPT); and Kristina Frick, a licensed veterinary technician (LVT) who will be training Frannie as a service dog using the Mission Based Trauma Recovery model.

### Network Partner Spotlight:

## TBICoE

As the TBI Pathway of Care manager within the MHS, the Traumatic Brain Injury Center of Excellence (TBICoE) promotes state-of-the-science care from point-of-injury to reintegration for service members, veterans, and their families to prevent and mitigate consequences of mild to severe TBI.

TBICoE works at the macro level, screening and briefing troops heading into theater, performing pre-deployment provider training at military treatment facilities, gathering data mandated by Congress and DOD, and overseeing research programs. TBICoE develops educational materials for providers, families, service members and veterans.

TBICoE's staff are located at 15 military hospitals and clinics, one Department of Veterans Affairs (VA) hospital, and a headquarters in the national capital region operating under the leadership of Navy Capt. Scott Cota.



TBICoE director Navy Capt. Scott Cota

# New & Ongoing Research

The Intrepid Network continues to look forward in its pursuit of understanding relevant TBI- and psychological health-related pathophysiology and treatment methods. This includes deliberate and intentional efforts at seeking external research funding throughout the calendar year. Research teams across the Intrepid Network are collaborating among themselves and with external colleagues to better understand TBI and associated behavioral health conditions and evaluate treatment modalities. Recent research toward these aims include:

- Researchers at **Joint Base Lewis-McChord** are exploring whether smartwatches can be used to track in real time post-TBI symptoms and perceptions such as headache, mood, fatigue, alcohol use, cognition, and self-efficacy.
- **ISC Fort Bragg** will soon begin recruitment for a research project being conducted in partnership with the Center for Neuroscience and Regenerative Medicine (CNRM), and a non-governmental organization, to evaluate the safety, tolerability and efficacy of erenumab compared to placebo on monthly headache days. This trial will be performed at Brooke Army Medical Center, Womack Army Medical Center, and Naval Medical Center Camp Lejeune.
- Led by **NICoE's** overall grant principal investigator, Kimbra Kenney, MD, a multi-site randomized clinical trial of a dietary intervention for persistent post-traumatic headache has completed enrollment across Walter Reed National Military Medical Center, Fort Belvoir Community Hospital, and Womack Army Medical Center at Fort Bragg. Hear updates of the study during a TBICoE presentation on March 7 at 1 p.m. ET on [Adobe Connect](#).
- In an ongoing study of pre-, peri-, and post-treatment data from nearly 300 service members in the **ISC Fort Hood** intensive outpatient program (IOP), preliminary findings indicate persisting statically/clinically significant effects on physical, emotional, and cognitive symptoms.
- **Joint Base Elmendorf-Richardson** and Drexel University were awarded a Creative Forces: NEA Military Healing Arts grant to study the effects of music therapy in service members with chronic pain and TBI.
- **NICoE** senior investigator Sara Lippa, PhD, was recently awarded grant funding to study blood-based and imaging biomarkers of traumatic cerebrovascular injury and their possible association with future cognitive decline. This study will involve longitudinal assessment of service members who participated in either the NICoE IOP program or the 15-year Natural History of TBI study.



- The **NICoE** was also awarded DHA research funding to study TBI recovery across the DoD and VA with partners from BAMC, Womack Army Medical Center, and the Rocky Mountain Mental Illness Research Education and Clinical Center (MIRECC) for Suicide Prevention.
- A longitudinal study at **ISC Fort Hood** is examining the effects of a structured 8-12 session course of cognitive rehabilitation on global auditory memory and verbal fluency in 100 service members.

## PUBLICATION SPOTLIGHT

Check out these recent publications from Intrepid Network scientists.

- [Altered Metabolic Interrelationships in the Cortico-Limbic Circuitry in Military Service Members with Persistent Post-Traumatic Stress Disorder Symptoms Following Mild Traumatic Brain Injury](#)
- [Clinical utility of PTSD, resilience, sleep, and blast as risk factors to predict poor neurobehavioral functioning following traumatic brain injury: A longitudinal study in U.S. military service members](#)
- [Creative Forces programming with military families: Art therapy, dance/movement therapy, and music therapy brief vignettes](#)
- [Extracellular Vesicle Proteins and MicroRNAs Are Linked to Chronic Post-Traumatic Stress Disorder Symptoms in Service Members and Veterans With Mild Traumatic Brain Injury](#)
- [Post-Traumatic Stress Disorder Symptoms Are Related to Cognition after Complicated Mild and Moderate Traumatic Brain Injury but Not Severe and Penetrating Traumatic Brain Injury](#)
- [Sleep disturbances following traumatic brain injury are associated with poor neurobehavioral outcomes in US military service members and veterans](#)
- [Treatment description and case series report of a phased music therapy group to support Veteran reintegration](#)

# The NICoE Supports Arts in Health Initiative

The NICoE has long partnered with Creative Forces and the National Endowment for the Arts to offer creative arts therapies. Now, NICoE leaders are helping grow a new branch of arts programming at Walter Reed National Military Medical Center (WRNMMC): Arts in Health. The initiative, already underway, has benefited from NICoE's expertise, as creativity has been a foundational component of the NICoE treatment program since inception.

The program takes its name from Arts in Healthcare, a multidisciplinary field aiming to transform the health care experience for all who visit the medical center. Through clinical- and community-focused efforts, the AIH program provides services such as community art-making, public musical performance, expressive writing and storytelling workshops, virtual resiliency sessions for health care providers, art exhibition and installation, and creative arts therapies.

Capt. Moira McGuire, USPHS, WRNMMC Division Chief of Integrative Health and Wellness, directs the effort with the help of AIH Clinical Coordinator Mallory Van Fossen, a licensed, board-certified art therapist, and Community AIH Specialist Sarah Moore, a registered dance movement therapist. Capt. McGuire has long advocated for an expansion of arts programming at WRNMMC.



*The Arts in Health team helped organize the WRNMMC Black History Heritage Trail, which opened on February 10. From left: Keynote speaker Navy Capt. Carlos Williams, the first Black director of the NICoE; Arts in Health team members Mallory Van Fossen and Sarah Moore, and Arts in Health director USPHS Capt. Moira McGuire, who is the WRNMMC Division Chief of Integrative Health and Wellness.*

"The Arts in Health Program is another example of Walter Reed's flagship status leading the way in creating opportunities to use creativity and expression to improve health outcomes and enhance overall well-being in patients, staff, family members, and all who visit the medical center," she said.

## Intrepid Network Patient Testimonials

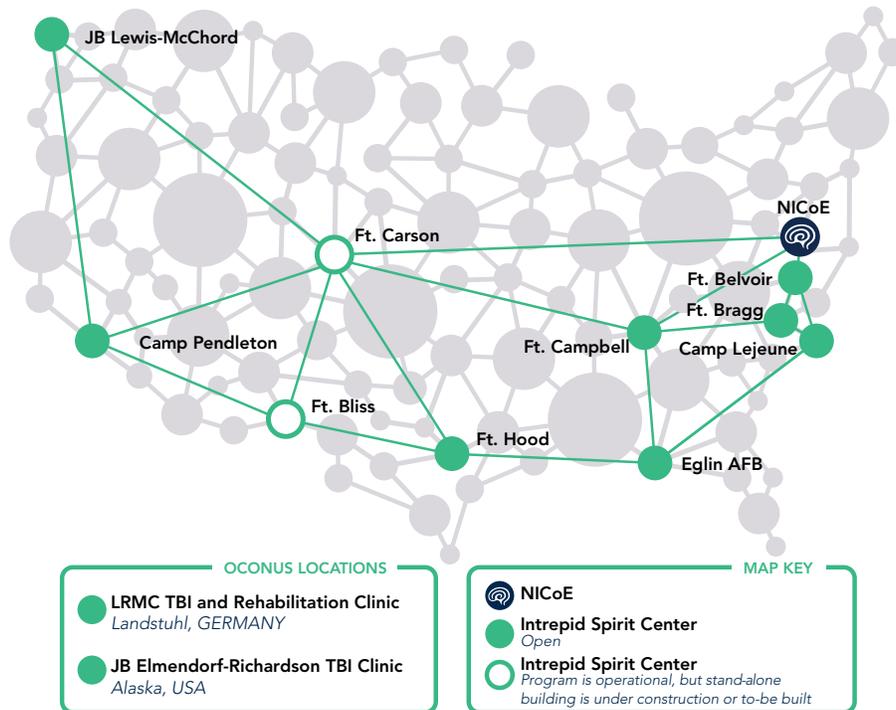
"The **ISC Fort Belvoir** program has been fantastic for my mental well-being. Art and Music therapies gave me valuable tools to handle the stress and anxiety that has been plaguing me for years. With the lower stress, I have been sleeping better and my mind has just been functioning better. The Intrepid Center has made a huge impact on my life and I am forever grateful."

"It may have been nearly 1 1/2 years since I finished the **ISC Fort Hood IOP**, but the experience and skills I learned there still are with me. ... Something I still have done EVERY day since IOP is 'hunt the good.' Recently, my depression was a bit out of control, but I still was able to find something positive that made me smile and helped pull me back. I really love finding the good in this crazy world. ... I am forever thankful for the entire IOP team. I mean it: All of you saved my life."

"I am grateful to have participated in the **Landstuhl Regional Medical Center TBI IOP**. It was evident to me that the team of doctors in each section communicated with one another and worked together on developing a multi-disciplined strategy to help address my many issues. All personnel in the TBI Clinic demonstrated exceptional professionalism every day, and their treatment approach was the best I've experienced in many years. Awesome Team. Awesome Treatment. Awesome Clinic!"

"This is the best care I have ever received. ... I felt like the **NICoE IOP** providers already knew me and we spent 50 minutes talking about what is wrong with me and not the background. I have never received that before. The takeaway is confidence in the diagnosis and recommendations."

# Defense Intrepid Network for TBI and Brain Health



## ISC CAMP LEJEUNE

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## ISC CAMP PENDLETON

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## ISC FORT CARSON

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## ISC FORT HOOD

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## ISC JOINT BASE LEWIS-MCCHORD

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## JOINT BASE ELMENDORF- RICHARDSON TBI CLINIC

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(907) 580-0014

## LANDSTUHL REGIONAL MEDICAL CENTER TBI PROGRAM

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## NATIONAL INTREPID CENTER OF EXCELLENCE

(Intrepid Network Headquarters)

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