

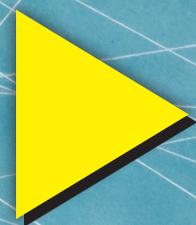
# WRIISC Advantage

SUMMER 2024

Power of the Mind  
Your Future Self

Enhancing Health  
Military  
Environmental  
Exposures

## Chronic Multisymptom Illness Treatment



Functional Medicine-based Integrative  
Whole Health Intervention

This edition of WRIISC Advantage focuses on a variety of topics pertinent to Veterans health, including the role of alternative medicine in caring for Veterans, recent WRIISC accomplishments in education and research and much more.

## ▶ DIRECTORS' CORNER

Reflecting on the last 24 years of WRIISC's existence, we are proud of the growth across the clinical, research, and education facets of our program. We are here to better the health of Veterans and improve their lives, and that is what we continue to do through our efforts. Highlights of our clinical program include not only diagnosing and addressing post-deployment symptoms and exposure concerns but offering Veterans solutions to live a better life with chronic symptoms. Our clinical program has grown to include various integrated health and wellness classes for Veterans and Whole Health interventions tailored to our population, some of which we have highlighted previously. This edition provides information about the inclusion of peer mentors in a Functional Medicine-based Integrative Whole Health Intervention for War-related Chronic Multi-symptom Illness as well as the power of the mind in health. WRIISC staff remain focused on addressing difficult to diagnose conditions and those potentially related to environmental exposure.

Our education program has grown tremendously over the past 24 years. Highlights of our education program include the development of new educational offerings for both Veterans and providers, including a Military Environmental Exposure (MEE) Certification Program for health care professionals. Educating both Veterans and providers who serve Veterans continues to be an interwoven component of keeping best practices for Veteran care at the forefront. We are very proud of our research program, which allows us to stay on the cutting edge of military exposure science. WRIISC researchers are consistently publishing results of their studies, which is shared in this newsletter. Through our engagement with Veterans, we determine areas that need advancement and develop research projects to address those issues. Our researchers share what we have learned to refine the care that is delivered to Veterans. We are determined to continue to make future work at the WRIISC exemplary in the VA community.

*Wes Ashford, MD, PhD*  
Director, CA WRIISC

*Helena Chandler, PhD*  
Director, NJ WRIISC

*Matt Reinhard, PsyD*  
Director, DC WRIISC

## Day of Learning for Environmental Health Clinicians

Hosted by VA's Health Outcomes Military Exposures (HOME)

Health Outcomes Military Exposures (HOME) hosted a virtual day of learning on Wednesday, July 10th, 2024, to provide essential training for VA staff to develop and sustain the skills needed to serve and evaluate Veterans with military environmental exposures. While this learning opportunity was open to all, the event was designed to provide training updates for VA Environmental Health Clinicians and Coordinators and provided attendees with valuable insights into how to provide exposure-informed care to Veterans.



Communication strategies known to positively improve communication between Veterans and staff about exposure concerns were also reviewed. This virtual day of learning is one example of how VA is providing learning opportunities to better equip health care professionals to provide high-quality care for Veterans who have military exposure concerns.

## Choose VA!

# WRIISC Functional Medicine-based Integrative Whole Health Intervention for War-related Chronic Multi-symptom Illness (FELLOW-CMI): The Veteran Peer-to-Peer Mentor VA Volunteer (P2PMV) Program

The Functional Medicine model of care offers an innovative treatment approach for Veterans with ongoing, debilitating chronic symptoms. This approach seeks to determine the nature of each health issue and personalize a care plan. NJ WRIISC recently developed and has been pilot testing a Functional Medicine-based Integrative Whole Health Intervention for War-related Chronic Multi-symptom Illness (FELLOW-CMI). This is an individualized six-month telehealth program that provides functional medicine assessments, targeted nutritional supplementation, nutrition coaching, adaptive exercise coaching, mindfulness meditation, and yoga.

An obstacle for Veterans with deployment-related CMI is accessing sufficient support on a regular basis to enhance self-efficacy in self-management of their symptoms. Peer support models are an efficient way to augment formal programs, increase participant trust, and build on the strength, knowledge, and experience of peers who have walked the same paths in the participants' health journey (as shown in the figure below).

Interconnected Benefits from Veteran Peer-to-Peer Support for Deployment Related Chronic Multi-symptom Illness



Adopted from: Money, et al., 2011

Adopting the best practices and principles for peer support programs to manage chronic illness, the NJ WRIISC developed a Peer-to-Peer Mentor VA Volunteer (P2PMV) for Veteran graduates of the FELLOW-CMI program. Onboarded by the VA New Jersey Health Care System Center for Development and Civic Engagement (CDCE) as VA Volunteers, a total of six Veterans are currently serving as peer mentors for the WRIISC FELLOW-CMI program (Table 1).

As a result of the P2PMV program, we have seen a significant improvement in the program participants' attendance and engagement in group coaching sessions. Feedback from participants about the impact of Veteran peer mentors has been positive. Examples include the following themes:

- Fantastic camaraderie has developed between peer mentors, with Veteran-bonding happening beyond what is seen in the formal coaching sessions.
- Validation from peer mentors of new participant's experiences and feelings give mentees hope and encouragement to stay with the process and complete the program.
- Peer mentors share success stories and advice, but also their failures and learned lessons, providing motivation to others that results can and will happen in their journey to health.

- As they "give back," peer mentors relayed their appreciation for the opportunity to continue their path to better health.

Table 1. Qualities & Qualifications of NJ WRIISC P2PMV

- Do not have to be in "perfect health" to be a peer mentor.
- Demonstrated exemplary commitment by completing all the aspects of their respective 6 months of intensive individual and group health coaching sessions.
- Completed additional mandatory trainings in relevant areas including VA Whole Health and Peer Facilitation modules.
- Committed to six months as a peer mentor (up to 12 hours/month on mentoring activities, meetings and trainings).

Successful integration of Veteran peer mentors into the FELLOW-CMI program has had a positive impact on both the mentees and the mentors. As far as we are aware, this peer-to-peer mentoring program that focuses on deployment-related CMI is the first of its kind in the VHA.

WRIISC thanks the following individuals for their involvement in this project: Omowunmi Osinubi, MD, M.Sc., MBA, FRCA, ABIHM, Steven Greer, MS, EP-G; Elijah Sacra, FMCHC, CPT, E-RYT 200; Clarissa A. Kussin, FMCHC, CNHPE-RYT 500; Pauline McManus, BSN, RN, COHN-S; Carrie J. Carlson, DO, FAAFP, IFMCP, ABOIM; Kari Haws, PhD and Selene Mak, PhD, MPH.

Reference: Money N, et. al. Best practices identified for peer support programs. Defense Centers of Excellence: for Psychological Health and Traumatic Brain Injury. Final Report. 2011. Available at: [https://www.mhanational.org/sites/default/files/Best\\_Practices\\_Identified\\_for\\_Peer\\_Support\\_Programs\\_Jan\\_2011.pdf](https://www.mhanational.org/sites/default/files/Best_Practices_Identified_for_Peer_Support_Programs_Jan_2011.pdf)

## VETERANS HEALTH CARE INNOVATION FOR THE WIN!

We are thrilled to announce that Women's Operational Military Exposure Network Center of Excellence (WOMEN CoE, CA WRIISC) Data Scientist, Jordan Nechvatal, PhD, and his team won first place in the inaugural Veterans Health - MIT Hacking Medicine event in Tampa, FL, May 17th-19th, 2024!

The team was tasked with the, "Hire faster and more competitively" track, one of VA's top health care priorities set forth by the Under Secretary for Health, Dr. Shereef Elnahal. They developed a generative AI solution that reduces the time it takes hiring managers or supervisors to review qualified candidates by 92%! The innovative solution seamlessly integrates into existing VA systems, reduces hiring bias, promotes diversity, and ensures humans remain in full control. As a result, the best candidates are hired more quickly and the HR process is more streamlined, and most importantly, our Veterans receive top-quality care.

# Your Future Self: Power of the Mind

WRIISC health coaches have the honor of partnering with Veterans ready to take control of their health and well-being. Veterans often manage many health issues born from experiences outside their control – injuries, exposures, trauma – which can be physically, cognitively, and emotionally draining. Some Veterans see themselves as broken, and this belief, repeated over the years, has become part of their identity – their truth. Through the health coaching process, Veterans learn to accept where they are now, while focusing on what they can control and what they can do.

During the coaching process, Veterans set goals and take action steps; however, goal attainment alone is not enough for sustainable behavior change. There are two keys to lasting lifestyle change: a new identity and a support system. In health coaching, Veterans are invited to create a new identity and grow their support community. Health coaches use guided imagery meditation and visioning exercises to help Veterans create a health vision. Using these techniques, Veterans have a unique opportunity to meet their future self, who is living a life of optimal health. They travel on an

inner journey to a new, yet somewhat familiar, environment where they have a conversation with their future self. They gain wisdom and insight about who they need to be and what support they require to move from where they are now to where they want to be.

Imagine a Veteran who wants to stop crash dieting and exercise more. They see their future self as lean, mobile, and ready to tackle any challenge. They identify with being an outdoor enthusiast who is active, fit, and healthy. Now, imagine that they had a long day at work and are hungry. They are tempted to grab fast food on the way home. They pause, take a breath, and ask, “What would my future self, do?” They recall their new identity—they are lean, mobile, and fit. They think about their support system and have a choice to move closer to or away from their future self.

When a Veteran chooses to make lifestyle changes, it’s critical they see themselves differently and be open to expanding their circle of support. This process of self-discovery and shifting perspectives on oneself and others requires courage and vulnerability, and what’s also true are the rewards of improved health and quality of life can be significant. *Through health coaching, Veterans are equipped and empowered towards leading their best, healthiest lives one choice at a time.*

## Research Matters

WRIISC continues involvement in research related to Veterans’ health. DC WRIISC and Complex Exposure Threats Center (CETC), in collaboration with Explosive Ordnance Disposal Information Management System (EODIMS) program managers, published the below commentary.

**PUBLICATION TITLE:** Linked Exposures Across Databases (LEAD): An exposure common data elements aggregation framework to facilitate clinical exposure review.

**QUESTION:** How can we collect exposure information across many different databases to create exposure risk metrics that are easier for clinicians and researchers to understand and integrate into Veterans’ care?

### FINDINGS:

- ✓ Linked Exposures Across Databases (LEAD) is a framework that outlines a method for collecting exposure information and creating exposure risk metrics that are easy to understand.

**ADDITIONAL INFORMATION:** This publication by Immanuel B.H. Samuel, Kamila Pollin, Sherri Tschida, Michelle Prisco, Calvin Lu, Alan Powell, Jessica Mefford, Jamie Lee, Teresa Dupriest, Robert Forsten, Jose Ortiz, John Barrett, Matthew Reinhard, and Michelle Costanzo appears in *Frontiers of Public Health* in May 2024. Available at: <https://www.frontiersin.org/journals/public-health/articles/10.3389/fpubh.2024.1408222/full>

- ✓ LEAD characterizes exposures using exposure common data elements (ExCDE). These include exposure intensity, route, proximity, symptoms at the time of exposure, duration and frequency, period or time of exposure, and protective controls.
- ✓ LEAD consolidates the data into risk metrics that can be used by clinicians and researchers.

### MEANING:

Existing exposure assessment tools are limited and often do not capture metrics that are relevant to clinical care. LEAD provides a way to summarize exposures that are relevant for clinical care. It does so by offering a template for collecting and integrating exposure information across different sources and uses that information to provide exposure risk metrics for Veterans. This helps to promote consistent communication about exposures and interpretation of exposure-related health risks across clinical settings. LEAD therefore advances military exposure science and supports exposure-informed clinical care for all Veterans.



# HIGHLIGHTING WRIISC'S COLLABORATING PARTNERS

Partnering with individuals and teams across VA, Department of Defense (DoD), other federal agencies, as well as universities and research foundations is critical to advancement in the field of Veterans health.

The Complex Exposure Threats Center (CETC) is collaborating with the University of Maryland (UMD) to better understand the link between military environmental exposures and long-term health. Strategic collaborations with academic institutions like UMD are critical for CETC as complex emerging exposure threats require broad perspectives, distinct experiences and expertise, expansive infrastructure, and diverse resources to augment our existing staff capabilities and services. UMD is a key CETC partner because of their multidisciplinary research expertise encompassing fields of physiology, exercise science, sport psychology and neuroscience, computer science, biomechanics, and molecular science.

The CETC-UMD team developed a new research study, coined the Testing Exercise Response Reflecting Allostatic Profile In VeteraNS (TERRAPINS) Study, that assesses multiple body systems in Veterans with a history of complex military environmental exposures. Veterans with uniquely hazardous occupations are continually exposed to various types of environmental conditions

(e.g., sub-concussive blasts, heavy metals, etc.) that may negatively impact their long-term health.

**TERRAPINS** applies an allostatic load (i.e., biological “wear and tear”) model using exercise challenges and other physiological measures (e.g., neuroimaging) to detect biological dysregulation and functional impairment features that can be linked to available military environmental exposure information. When combined with detailed exposure and health histories acquired at CETC, this model can provide key insight into how the cumulative or subclinical exposures may adversely and chronically impact Veteran health. TERRAPINS is in its pilot phase with tentative plans to start study recruitment in August 2024.

This collaboration serves as a model for future partnerships that accelerate research and develop strategic responses to Veteran health needs and concerns.

## Attention VA Health Care Professionals – Earn Your Military Environmental Exposure (MEE) Badge Today!

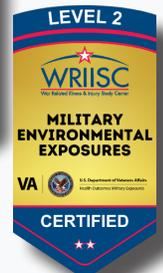
Did you know that our Military Environmental Exposure (MEE) Certification Programs have surpassed 1000 health care professional completions of our Level 1 and 300 for our Advanced Level 2 MEE programs to date? VA health care professionals who are certified can also acquire and display the Level 1 or Advanced Level 2 MEE Certified Badge of Recognition in their email signature block in acknowledgment of their dedication to improving care and Veterans' experience of care.

As you might recall, the VA worked with the American College of Preventative Medicine (ACPM) to offer these exceptional certification opportunities to those in both the VA and in our community settings.

Inspired by VA employees and created by WRIISC education team, this badge recognizes VA health care professionals who have sought further education in military environmental exposures. “Displaying” this badge promotes the significance of the certification, makes it easier to identify those who are certified, and encourages others to learn more about serving Veterans with military environmental exposure concerns.

We are pleased that our WRIISC education continues to support health care professionals with the specialized knowledge needed to address and care for military exposure concerns of Veterans. Become one of the many VA health care professionals across the Nation who are proudly displaying this badge and signifying their commitment to providing exposure informed care to Veterans. For more information on how you can enroll in these certification programs, visit:

<https://www.acpm.org/education-events/military-environmental-exposures-certification/>



# Around the WRIISC News

## NJ WRIISC

### Airborne Hazards Symposium

The Airborne Hazards and Burn Pits Center of Excellence (AHBPCE) recently hosted a full-day virtual symposium on June 11, 2024, reflecting on a decade of impact of the Airborne Hazards and Open Burn Pits Registry. Thanks to the advocacy of Veterans, Service members, and those who care for them, we have a national registry that captures the experience of almost half a million Veterans and Service members. VA has an opportunity and obligation to use this information as an organization to understand the effects of military environmental exposures and their potential long-term consequences.

During this virtual symposium, attendees had the opportunity to hear personal accounts from several Veterans who have interacted with the registry, comprehensive specialty evaluations offered by the Post-Deployment Cardiopulmonary Evaluation Network, and research studies. Several researchers discussed how they utilize the registry to answer Veteran-centric research questions covering topics such as sleep-disordered breathing, lung function, and long COVID.

The AHBPCE in collaboration with the Houston VA's IQuEst center, shared how they monitor and analyze registry data to support VA leadership and the field to continuously improve the Veteran and provider experience of the registry examinations. Finally, several new national programs focusing on VA's transition to providing exposure-informed care were highlighted.

A recording of the symposium will be available in the coming weeks and will be posted to <https://www.warrelatedillness.va.gov/WARRELATEDILLNESS/AHBPCE/Registry10Y.asp>

### AIRBORNE HAZARDS AND BURN PITS CENTER OF EXCELLENCE



Airborne Hazards and Burn Pits Center of Excellence (AHBPCE) just celebrated its 5-year anniversary! In just 5 years the Center has established itself as a trustworthy organization whether that's for Veterans seeking evaluation, providers seeking clinical guidance, researchers seeking to collaborate in advancing knowledge, or policy makers seeking to make decisions that will positively impact Veterans' lives. The next edition of this newsletter will cover the AHBPCE 5-year anniversary and its key accomplishments in detail.

## DC WRIISC

### Gulf War Illness Veterans Sleep Disturbance

In March 2024, the DC WRIISC published an article in *Sleep Advances* that is the first known examination of a revised clinical cutoff for determining Pittsburgh Sleep Quality Index (PSQI) "disturbed sleep" in Veterans with Gulf War Illness (GWI). For civilians and military personnel, PSQI is the most common self-administered sleep quality survey, that helps researchers determine "good" and "poor" sleepers.



Improved sleep quality is known to positively impact overall health in patients presenting with chronic multi-symptom illness (CMI) (e.g., GWI, PTSD, and fibromyalgia). Sleep is an important variable in Gulf War health and Gulf War Veterans likely experience diminished health-related quality-of-life (HRQoL) because of poor sleep. Yet, no previous research has examined HRQoL for Veterans with GWI and clinically significant sleep disturbances.

There is growing evidence that the PSQI cutoff for "poor sleep," however, does not necessarily signify clinically significant sleep deficiencies in various subsets of the population. Only 6% of Veterans in this study would have met criteria for good sleep with the established PSQI cutoff ("poor sleep quality") determining clinical insomnia patients from controls in the civilian population. Instead, a larger PSQI cut-off score was used for "clinically disturbed sleep" based on a military sample examining clinically relevant sleep deficiency. Our findings support evidence that for clinical military populations, the PSQI lacks the ability to determine reasonable expectations of sleep quality due to the scale that it uses.

In our sample, clinically disturbed sleepers had significantly higher symptom presentation when they met the criteria for GWI. Additionally, clinically disturbed sleepers demonstrated significantly worse depression, post-traumatic stress, pain, cognitive complaints, and increased daytime fatigue.

The GWI demographic may benefit from sleep-focused treatments, and including a sleep assessment in Gulf War studies may illuminate physical and mental health concerns for those with CMI conditions.



## CA WRIISC

### The Therapeutic Potential of Yoga for Veterans with Alzheimer’s Disease

Yoga shows significant promise as a complementary therapy for managing a range of health problems relevant to Veterans, including chronic pain, mood, and Gulf War Illness. Researchers Dr. Adriel Brown (WRIISC Research Fellow) and Dr. Peter Bayley (Director of Research) at the CA WRIISC recently submitted a review of the current scientific research examining the impact of yoga on Alzheimer’s disease (AD) for publication. AD is a brain disorder causing memory loss, cognitive decline, and behavioral changes, which affects millions of older adults. While current medications offer limited relief, non-drug approaches like yoga and meditation are gaining attention for their potential benefits. Decreased cognitive function is a frequent complaint among WRIISC Veterans and by studying other populations, such as those with AD, we can learn about approaches that may be useful more broadly.

Yoga has been shown to improve balance, flexibility, mobility, and posture in



AD, which are crucial for maintaining independence and reducing fall risk in AD patients. Yoga practices have also been associated with improvements in memory, attention, and cognitive engagement. Some studies suggest that this may be due to a reduction in inflammation in specific brain regions involved in cognition. Yoga can also positively impact mood, reducing symptoms of anxiety, depression, and stress. Improved emotional well-being can lead to better quality of life for patients and their caregivers.

Despite these encouraging findings, more robust research is needed. Current studies are often small, and future research could benefit from larger, randomized control trials with diverse populations to confirm the long-term benefits of yoga for patients with AD.

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War Related Illness & Injury Study Center

# WRIISC Advantage

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VA



U.S. Department of Veterans Affairs  
Health Outcomes Military Exposures



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## VETERANS' HEALTH MATTERS PODCAST SERIES



### Intended for:

- Clinicians, Veterans, and caregivers.
- Information about topics related to military environmental exposures.
- Latest episodes answer common questions about benefits and service connection for Veterans and provide concrete tips for how clinicians can speak with Veterans.

**New Episodes Available Now**

More details will be posted at:

<https://www.spreaker.com/podcast/veterans-health-matters--4478189>

