

# Center for the Study of Traumatic Stress

*Strategic Growth*

## 2024 Annual Report

CSTS



Uniformed  
Services  
University



## CONTENTS

From the Director .....	1
Our Mission.....	3
What's New in 2024.....	4
Research.....	7
Education and Training .....	14
Consultations.....	18
Publications .....	21
Presentations, Interviews and Briefings, Awards and Appointments ..	27
CSTS Personnel.....	36
Partnerships.....	44
Funded Grants.....	48

Throughout 2024, CSTS expanded its scope and its staff (now nearly 100 personnel), launching new initiatives that underscore the Center's commitment to evidence-based approaches and proactive responses to current and emerging needs.

— Dr. Robert J. Ursano



# From the Director

Now in its 37th year, the Center for the Study of Traumatic Stress (CSTS) at Uniformed Services University (USU) remains dedicated to its mission of



supporting the Department of Defense (DoD) and the Nation by conducting cutting-edge research and providing education and consultation aimed at mitigating the impact of trauma. CSTS is at the forefront of applying science-based solutions to address the behavioral health

challenges stemming from trauma, disasters, terrorism, community violence and public health threats. The CSTS mission is accomplished through leadership, research, training, education, service, outreach, collaboration, consultation and global health engagement. With its multidisciplinary and collaborative team of scientists, educators, clinicians, consultants, staff and thought leaders, CSTS advances its mission, helps sustain the Nation's readiness and contributes to the global community as an internationally renowned Center in trauma and disaster psychiatry.

Throughout 2024, CSTS expanded its scope and its staff (now nearly 100 personnel), launching new initiatives that underscore the Center's commitment to evidence-based approaches and proactive responses to current and emerging needs. CSTS has grown strategically to support the DoD and the Nation with world-class research, education and training and consultation. Below, I highlight a few notable efforts that occurred in 2024.

CSTS received funding and initiated the Suicide Avoidance Focused Enhanced Group Using Algorithm Risk Detection (SAFEGUARD) initiative.

SAFEGUARD is built from the foundational work conducted in the Army Study to Assess Risk and Resilience in Servicemembers (STARRS) epidemiological studies. Through machine learning and predictive analytics, three targeted timepoints were identified in which service members are at the greatest risk for suicide. SAFEGUARD interventions target: (1) first duty assignment (SAFEGUARD Life Skills); (2) the period following mandatory training (SAFEGUARD Life Force); and (3) the period following psychiatric hospitalization (SAFEGUARD Pathfinding). SAFEGUARD represents a culmination point for the foundational and groundbreaking research conducted in STARRS. Also in 2024, CSTS received funding for a new effort driven by Congressional interest in digital health solutions for substance abuse. CSTS established the Alcohol and Substance Use Prevention and Recovery (ASUPR) program. ASUPR will provide a platform to further evaluate and expand on much needed evidence-based programs for alcohol and substance abuse and recovery in service members. Sixteen programs are being evaluated as part of ASUPR and funding selections will be made early in 2025. CSTS also initiated the Military and Veterans Posttraumatic Stress Disorder (PTSD) Adaptive Platform Clinical Trial (M-PACT) study. M-PACT is a multi-site study across the military health system (MHS) that aims to streamline studies of different drug therapies for PTSD in service members.

CSTS also continued its support of interagency partner needs. For example, this past year the Department of Homeland Security (DHS) funded CSTS for a five-year project aimed at building the resilience of its employees. The Resilience and Stress

CSTS has grown strategically to support the DoD and the Nation with world-class research, education and training and consultation.

**From the Director, continued from page 1**

in Homeland Security Employees (RSHSE) program will collect data from Homeland Security Investigations (HSI) employees to understand risk and resilience factors in this population. RSHSE aims to provide the impetus for periodic health and resilience assessments that can serve as a basis for establishing evidence-based resilience programs for DHS. Similarly, CSTS has provided critical support to the National Guard Bureau (NGB) and Army National Guard (ARNG) through the establishment and growth of CSTS program areas such as consultation on integrated primary prevention (IPP) approaches and helping to establish a standard behavioral health program system of care across the 54 States and Territories.

As in past years, CSTS continued to be a leader in providing disaster psychiatry support, globally and domestically. For example, CSTS continued its support of Ukraine and Israel, providing consultation and “just-in-time” information products to help our allies and partners. In addition, CSTS and Department of Psychiatry colleagues led military-to-military engagements with our African partners of Senegal and Mozambique. CSTS consultation was also sought to help officials in Brazil deal with catastrophic flooding that occurred during the Spring of 2024. Here at home in the US, CSTS consulted with numerous agencies across the country, such as Kansas City Fire Department officials following the mass shooting at the Super Bowl parade, officials in Southern California who dealt with wildfires, and officials in Madison, Wisconsin supporting the community impacted by the Abundant Life Christian School shootings.

Our annual Amygdala, Stress, & PTSD Conference continued in 2024 with both the large conference in April of 2024 as well as a featured speaker engagement in the fall, with General (Retired) Paul Nakasone, former Director of the National Security Agency (NSA). GEN Nakasone spoke about the criticality of behavioral health and leadership in national security. Moving into 2025, the Amygdala, Stress, & PTSD Conference and our fall Lecture Series were rebranded as the Brain, Behavior, & Mind Spring Conference and Fall Lecture, a change reflecting a broader scope and focus.

In 2024, CSTS Scientists published 69 peer-reviewed manuscripts in leading national and international journals. Moreover, CSTS Scientists were active in professional conferences and meetings, giving over 100 presentations. As with the growth of our staff, capabilities and productivity, CSTS has also added new partners to its research network, ensuring that CSTS continues to deliver evidence-based solutions where and when they are needed.

In this year’s Annual Report, you will find brief summaries of new and ongoing activities. CSTS has indeed grown strategically to meet the present needs of our service members, providers and the public, while remaining vigilant for how we can best support each in the future.

Robert J. Ursano, MD  
Professor of Psychiatry and Neuroscience  
Department of Psychiatry  
Director, Center for the Study of Traumatic Stress  
Uniformed Services University

The CSTS mission is accomplished through leadership, research, training, education, service, outreach, collaboration, consultation and global health engagement.

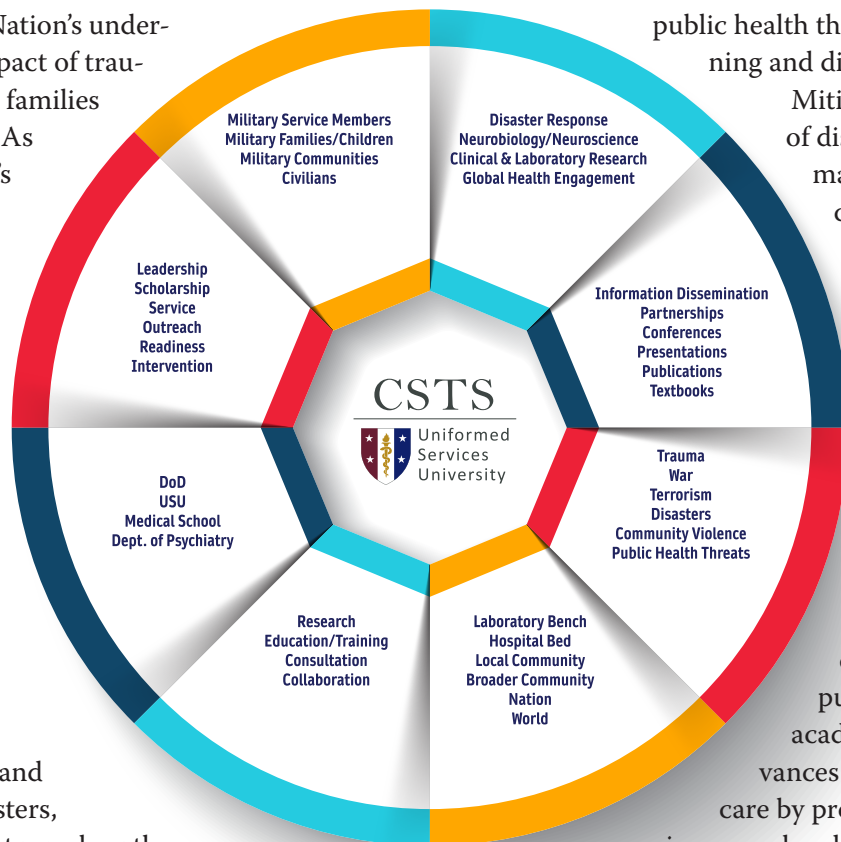
# Our Mission

CSTS supports the MHS, USU, and the mission of the DoD. The Center is committed to advancing trauma-informed care and is dedicated to furthering the Nation's understanding of the impact of trauma on individuals, families and communities. As part of our Nation's federal medical school (America's Medical School) at USU, the Center is well-positioned to rapidly respond with DoD mission-relevant activities.

The Center's work spans a broad range of trauma exposures, including combat, terrorism, natural and human-made disasters, public health threats, such as the COVID-19 pandemic, and humanitarian operations. CSTS has been involved in nearly

every major disaster our Nation has faced over the past 37 years. The Center works to ensure that behavioral health is addressed in the face of public health threats, disaster planning and disaster recovery.

Mitigating the effects of disaster and trauma in military and civilian populations builds community and national resilience. The Center informs and educates community, regional, state, national and global stakeholders in government, industry, healthcare, public health and academia. CSTS advances trauma-informed care by providing leadership in research, education, training, consultation, global health and service.



## US SERVICE MEMBERS

CSTS is a multidisciplinary and multifaceted research center that possesses the capabilities to study psychiatric and psychological phenomena and their sequelae at the molecular, individual, organization, national and international levels. Our core and focused capabilities illustrate the key ways that CSTS ensures relevant research and consultation for our stakeholders.

## CORE CAPABILITIES

- Rapid Response to Psychological Impact of Emerging Threats
- Disaster Psychiatry
- Public Health
- Laboratory Neuroscience
- Translational Science
- Randomized Clinical Trials
- Applied Military Research
- Cutting-Edge Statistics & Methodologies
- Program Development & Evaluation

## FOCUSED CAPABILITIES

- Big Data & Machine Learning
- Early Emotional Response to Trauma & Stress
- Event-Related Disorders
- Mental Health Sequelae
- Treatment
- Sleep & Performance (Lab & Field)
- Child & Family
- Genomics

# What's New in 2024

## Machine Learning & Predictive Analytics Capability

In 2024, CSTS and its partners continued advancing predictive analytics to support service member mental health. Through STARRS and collaborations with USU's Center for Military Precision Health and the National Institute of Mental Health (NIMH) Psychiatric Genomics Consortium (PGC), CSTS has been at the forefront of machine learning and predictive analytics since 2015. The first STARRS publication using machine learning, Kessler et al. (2015), developed a risk model for suicide among Soldiers recently discharged after psychiatric hospitalization. Since then, STARRS Scientists have created more than 20 machine learning models to identify service members at risk of suicide at critical points in their military careers. CSTS has also applied machine learning to genetic data, publishing a study using the NIMH PGC dataset (Dunn et al., 2017). Between 2019 and 2022, STARRS investigators and partners produced six additional genetic studies, culminating in a 2023 publication on whole genome sequencing and suicide attempts among service members (Wilkerson et al., 2024). CSTS's success in identifying who is at risk, as well as when and where risk is highest, has drawn attention from the Office of the Assistant Secretary of Defense for Health Affairs (ASD-HA). In 2024, ASD-HA funded CSTS and its collaborators to apply these models in delivering precision medicine interventions. This initiative, collectively known as **SAFEGUARD** (Suicide Avoidance Focused Enhanced Group Using Algorithm Risk Detection), aims to integrate predictive analytics with scalable interventions at key stages of military service to reduce suicide risk and strengthen mental resilience. SAFEGUARD has already gained significant momentum. The III Armored Corps Commanding General has approved research activities at Fort Cavazos in Texas, intervention content and training manuals have been developed and the team has provided briefings to senior DoD and Army

leadership, including: ASD(HA), III Armored Corps Commanding General, Deputy Assistant Secretary of the Army for Military Personnel and Quality of Life, Deputy Under Secretary of the Army for Personnel and Readiness and Principal Deputy Assistant Secretary of the Army for Manpower and Reserve Affairs. With SAFEGUARD, CSTS continues to lead the way in applying machine learning and predictive analytics to enhance service member mental health and suicide prevention efforts.

## SAFEGUARD INTERVENTIONS Critical Touch Points for Intervening



**First Duty of  
Assignment**

**EARLY  
INTERVENTION**

**SAFEGUARD  
Life Skills**



**Following  
Mandatory Training**

**TARGETED REMOTE  
GROUP INTERVENTION**

**SAFEGUARD  
Life Force**



**Psychiatric  
Hospitalization**

**INTENSIVE CASE  
MANAGEMENT**

**SAFEGUARD  
Pathfinding**

## Alcohol and Substance Use Prevention and Recovery (ASUPR) Program

In September 2024, CSTS launched the ASUPR program to expand evidence-based programs and resources for alcohol and substance use prevention and recovery within the MHS. The ASUPR program aims to enhance access to effective support for service members by providing program consultation, evaluation, partner engagement and training resources. To date, the ASUPR program has convened more than 30 experts and stakeholders for strategic planning and program optimization. The program also received 16 project proposals, which have undergone programmatic and peer review. Final selections will be announced in 2025.



## Resilience and Stress in Homeland Security Employees (RSHSE)

CSTS has initiated a five-year project, RSHSE, led by Drs. West and A. Walsh, to study resilience among HSI personnel conducting child exploitation investigations. HSI is a global leader in the fight against child exploitation, with hundreds of agents working on these highly challenging cases. CSTS Scientists are conducting interviews with HSI agents and analysts nationwide and reviewing existing research to identify factors that support or hinder resilience in this workforce. The findings will inform the development of periodic health and resilience assessments, ultimately enabling CSTS to provide actionable recommendations to the DHS leadership.

## Bereaved Family Self-Care Toolkit

The Bereaved Family Self-Care Toolkit was developed by the CSTS Child & Family Program (CFP) in collaboration with the Tragedy Assistance Program for Survivors (TAPS), to support bereaved families in navigating grief. Designed as a virtual house, the toolkit features eight rooms, each representing a different aspect of grief adaptation. For example, the Living Room focuses on relationships with family, friends and children; the Kitchen focuses on healthy eating and behavior moderation; and the Bedroom focuses on emotions, grief and mental health. Each room provides resources in multiple formats, including personal video stories from individuals



sharing their grief journeys, expert discussions on grief and Prolonged Grief Disorder (PGD) and suicide prevention information. A dedicated resource section offers links to additional support. Explore the toolkit here: <https://www.cstsonline.org/bereaved-family-selfcare-toolkit/welcome>

## Military and Veterans PTSD Adaptive Platform Clinical Trial (M-PACT)

M-PACT is a multi-site study designed to explore novel treatment options for PTSD in military and veteran populations. The study currently includes active intervention cohorts for fluoxetine, daridorexant and the newly added SLS-002 (intranasal ketamine). Participants are randomized into multiple cohorts, with a shared control group allowing for comparisons across all interventions. CSTS coordinates three MHS study sites: Walter Reed National Military Medical Center (WRNMMC), Alexander T. Augusta Military Medical Center (ATAMMC) and Wilford Hall Ambulatory Surgical Center (WHASC). All three sites have made significant progress in 2024, with WRNMMC securing site approval and Institutional Review Board (IRB) approval. ATAMMC and WHASC are awaiting local IRB approval and will then proceed with submission to the IRB of record. Site activation is expected in early 2025.



## Brain, Behavior, & Mind Conference (Formerly Amgdala, Stress, & PTSD Conference)

Brain, Behavior, & Mind is a global forum series featuring distinguished scientists, clinicians and leaders across neuroscience, psychiatry, psychology and public health. Each event integrates cutting-edge research — from genetics to community health, and from laboratory science to clinical care — to advance treatment approaches for individuals facing high-

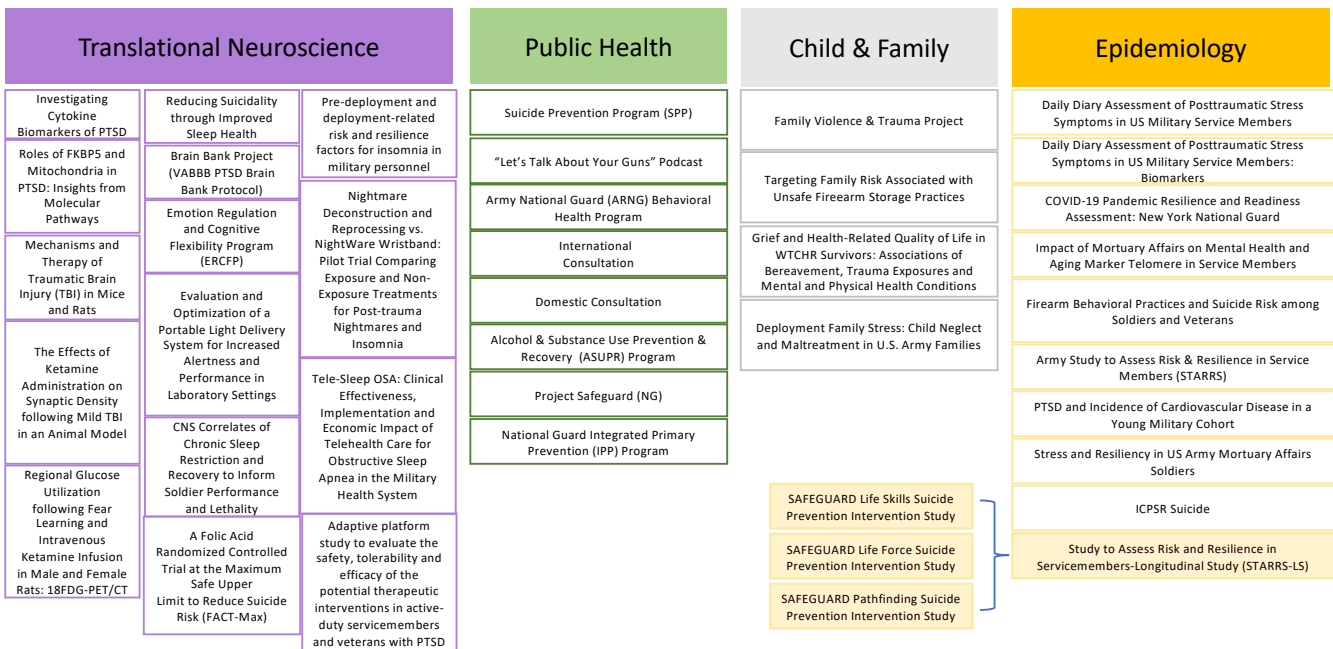
stress environments. Sponsored by CSTS in collaboration with USU's Department of Psychiatry, Neuroscience Program, Department of Family Medicine, Center for Deployment Psychology (CDP) and the Brain and Behavior Hub, these forums address critical issues in mental health and resilience. The Spring 2024 Conference (previously the *Amygdala, Stress, & PTSD Conference*) featured renowned speakers, including Drs. Sandro Galea, Joseph LeDoux, Karen Parker, Diego Pizzagalli and Leanne Williams. The Fall 2024 Distinguished Lecture welcomed Retired

General Paul Nakasone, former Director of the NSA and Commander of US Cyber Command.

## CSTS Growth

Over the past year, CSTS has expanded significantly, securing new grants and cooperative agreements. The number of projects has grown to 40, spanning four general program areas. To support this expansion, CSTS has increased its team to nearly 100 employees, ensuring continued excellence in research and program implementation.

## CSTS PROGRAM AREAS AND PROJECTS





# Research

## RESEARCH ON US SERVICE MEMBERS

### Study to Assess Risk and Resilience in Servicemembers – Longitudinal Study (STARRS-LS)



Study to Assess Risk and Resilience in Servicemembers - Longitudinal Study

CSTS continued providing scientific leadership, project management leadership and financial oversight for STARRS-LS, a multidisciplinary, collaborative project of Army Soldiers (including regular, guard and reserve) led by USU, University of California – San Diego, Harvard and University of Michigan. STARRS-LS includes studies that involved surveys collected from representative samples of new Soldiers and the entire Army, as well as studies of suicide deaths, suicide attempts, a pre/post deployment cohort and administrative data for all Soldiers on active duty in 2004 through 2021. The project includes biological samples and a longitudinal follow-up survey component that includes a representative sample of approximately 15,000 participants. In 2024, the research team completed the fourth biannual wave and began the fifth wave of follow-up survey data collection. Public use data are available through the Inter-university Consortium for Political and Social Research (ICPSR) at the University of Michigan. The team published five manuscripts in 2024, bringing the total to 134 since 2012.

### Attachment Style and Social Network Impact on Suicide Risk

In 2024, Center Scientists examined the relationship of attachment styles and social network size to lifetime suicidal behaviors among new Soldiers in the US Army. The study identified three attachment styles: preoccupied, fearful and secure. All three, along with social network size, were associated with suicidal ideation and attempt. Notably, the impact of social network size on suicide risk was significantly

influenced by the presence or absence of a preoccupied attachment style. These findings underscore the importance of understanding how attachment styles and social networks contribute to suicidal ideation, suicide attempts and the transition from ideation to action.

### Stress and Resilience in US Army Mortuary Affairs (MA) Soldiers

In 2024, active-duty MA Soldiers from the 54th Quartermaster Company (Fort Gregg-Adams, Virginia) participated in this ongoing study by completing 106 deployment-related questionnaires. Overall, more than 4,000 questionnaires have been collected since the study began in 2005. Data analyses in 2024 included: (1) examination of exposure to human remains, combat exposure and prior Middle East deployment as predictors of PTSD and depression; (2) change in rates of probable PTSD and depression over time; and (3) initial emotional responses to exposure to human remains. Manuscripts reporting the study findings are in progress for publication in scientific journals. Two posters describing military deaths and rates of PTSD and depression from 2006 to 2018, and a poster reporting findings on emotional reactivity to MA work, were presented at local and national scientific conferences. Findings from the study inform the education and training of Soldiers and other groups for deployment and work with human remains.

### Daily Diary Assessment of Posttraumatic Stress Symptoms in US Military Service Members (Daily Diary Study)

The Daily Diary Study represents the cutting edge in psychological assessment methodology, measures, equipment, technology and research design to better understand posttraumatic stress symptoms and improve the well-being of service members. In 2024, the software application that participants use to complete daily ecological momentary assessments underwent an update. Data analyses included examinations of

daily variation in suicidal ideation and both day-to-day and within-day variation in PTSD symptom clusters (intrusion, avoidance, negative cognitions/mood, hyperarousal). Manuscripts reporting findings on these topics were prepared and submitted for publication in scientific journals. Data analyses also included an examination of the relationship between sleep disturbances (e.g., disturbing dreams and nighttime awakenings) and PTSD symptom clusters. Broad findings from the Daily Diary Study were presented at the USU Brain Health Symposium.

### **Firearms Behavioral Practices in US Army Soldiers and Veterans**

In 2024, CSTS Scientists, University of South Florida and Harvard University collaborators disseminated key research findings at four scientific conferences: the National Research Conference on Firearm Injury Prevention, the American Psychological Association Convention, the Military Health System Research Symposium (MHSRS), and the VA/DoD Suicide Prevention Conference. Recent publications in scientific journals and book chapters focused on firearm suicide risk and prevention in service members. Future research examining motivations for gun ownership for safety/protection, anxiety and unsecure storage practices may help target interventions to prevent suicide death. Findings from this study have significant public health relevance in our understanding of the relationship between firearm storage practices and suicide death, and may inform harm reduction efforts in service members and veterans. Our research findings emphasize the importance of education and training those in “gatekeeper” roles within the military community, and suggest the usefulness of harm reduction and health promotion efforts.

### **Strengthening Resilient Emotions and Nimble Cognition Through Engineering Neuroplasticity (STRENGTHEN): Targets for Improving Psychological Health and Enhancing Performance**

CSTS continued its role as an Independent Verification and Validation (IV&V) partner for the DARPA (Defense Advanced Research Projects Agency)

STRENGTHEN (Strengthening Resilient Emotions and Nimble Cognition Through Engineering Neuroplasticity) program, evaluating its three performer teams as they initiated Phase 1 intervention studies. CSTS reviewed study materials, attended site visits and assessed treatment data, culminating in a comprehensive report with detailed analysis of performer teams’ research strategies, evaluation of progress toward milestones and recommendations for improving intervention transition potential. This report will inform Phase 2 of the STRENGTHEN program.

CSTS hosted a kick-off meeting with their recently established STRENGTHEN science panel. This multidisciplinary group of scientific advisers works with CSTS to facilitate the translation of STRENGTHEN research into practice in both military and civilian contexts. CSTS Scientists also began drafting a manuscript reviewing novel approaches being developed under STRENGTHEN to further broaden the program’s impact. More details can be found at: <https://www.cstsonline.org/research/darpa-strengthen>.

### **New York National Guard (NYNG) Study: Warfighter Readiness and Resilience Assessment: COVID-19 Activation**

The US National Guard (NG) served a critical role in the COVID-19 response. Identifying, monitoring and understanding risk factors associated with mental and behavioral health outcomes in COVID-19-activated NG service members is central to sustaining force readiness and disaster preparedness. In 2020, CSTS collaborated with NYNG to administer a public health surveillance assessment with 4,000 service members. In 2024, CSTS found that work tasks associated with high activation stress included patient transportation and working with the dead and families of COVID-19 patients. High work stress was related to PTSD, anxiety, depression and anger post-activation. Service members with personal COVID-19-related experience (themselves or a family member having COVID-19 or loss of a loved one due to COVID-19) had more posttraumatic stress; those with COVID-19-related loss were almost three times more likely to have PTSD. Study findings inform recommendations for leadership

to promote disaster-related health and readiness among NG personnel. Findings were published in scientific journals and presented at several professional conferences.



## RESEARCH ON CHILDREN AND FAMILIES

### Bereavement

#### *Bereaved Family Self-Care Toolkit*

The Bereaved Family Self-Care Toolkit (noted above) was developed in consultation with TAPS and helps bereaved military family members and others who have experienced the death of a family member. As part of CSTS's Suicide Prevention Program (SPP), the Toolkit provides information, materials and resources on practical and evidence-based self-care tips. Self-care is important for bereaved family members to mitigate stress and lower risk for negative physical and mental health outcomes, such as sleep problems, substance use and suicide.

#### *Finding the Words*

When someone at home or work seems to be experiencing serious challenges or distress, it can be difficult to find the right words to have a conversation that could ultimately help the individual and those around them who are impacted. Our "Finding the Words" video series provides specific words to use that will help anyone having difficulty initiating a critical conversation with family and loved ones, peers or someone they lead.

#### *Grief and Health-Related Quality of Life in World Trade Center Survivors*

An ongoing CSTS CFP project examines outcomes associated with trauma and bereavement in 9/11 survivors (i.e., individuals who worked or lived at or near the World Trade Center site in New York City on 9/11). Despite 9/11 survivors' high rates of losses on and after 9/11, minimal research has focused on the examination of grief responses and their effects on mental health in this population. Using existing and newly-collected data, the study is examining the complex inter-relationships of bereavement and trauma burden and physical and mental health burden in order to better inform World Trade Center Health Program resources. This project is being conducted in collaboration with colleagues at Columbia University, the World Trade Center Health Registry and Voices Center for Resilience (VOICES). Data collection for this project ended in December 2024 and analyses are underway.



*Arlington National Cemetery, Washington, DC.*

#### *Stepping Forward in Grief (SFG) Study*

A virtual app that addresses grief adaptation could be a helpful resource for bereaved military family members who often live far from available grief support services. CFP formed a partnership with Columbia University's Center for Prolonged Grief to adapt principles from Prolonged Grief Therapy (PGT), found to be helpful in civilian populations, for a digital intervention. This intervention aimed to assist with grief integration, thereby



reducing risk for long-term impairment. The goal of SFG, a randomized controlled trial, is to compare the effectiveness of two virtual apps (GriefSteps [GS] and WellnessSteps) in helping those bereaved by military service-related death. Results indicated that there were small, but statistically significant, improvements in grief and in functional impairment among those in the high grief group using GS. These results indicate that a novel modality, requiring little oversight or cost, can assist bereaved family members. A scientific manuscript describing these findings is in preparation.

### *Study of Long-Term Outcomes of Terrorism-Related Grief*

CFP partnered with VOICES, a nonprofit organization that aids 9/11-affected families, and the Canadian Resource Centre for Victims of Crime, an organization supporting family members who were bereaved by the Air India Flight 182 bombing, to investigate long-term bereavement outcomes in family members following a terrorism-related death. The team published two manuscripts related to these data. A recent analysis of these data examined predictors of co-occurring pain and comorbid psychiatric conditions in family members of 9/11 victims. These findings were presented at the 2024 American Psychiatric Association Annual Meeting in New York, NY.

### *Bereavement Coping Studies*

The goal of these ongoing studies is to determine coping strategies used by military family members following bereavement and to examine associations among risk factors (i.e., hopelessness and reasons for living), specific coping strategies and outcomes (i.e., grief, depression, suicidal ideation). A manuscript that described the associations between these factors and suicidal ideation was recently published. Information from this study was also used to inform the development of an interactive website called BALANCE (Bereavement Adaptation: Learning And Navigating Coping Essentials) that allows users to understand, monitor and adapt the coping strategies that they use to manage their grief. In addition, CFP Scientists conducted a comprehensive literature

review of coping strategies following violent losses. This recently published work examined the types of coping employed and how these strategies relate to bereavement outcomes.

### *Disenfranchised Grief*

CFP collaborated with Sons and Daughters in Touch (SDIT), an organization of children whose fathers died or were missing in action (MIA) in the Vietnam War, and found that this population consistently felt their loss was unacknowledged or rejected. This phenomenon is consistent with disenfranchised grief (DG), which refers to the experiences of bereaved persons whose grief was not or could not be openly acknowledged, publicly mourned or socially supported. In response, CFP developed a measure of DG, created items for this instrument, refined them in response to feedback from SDIT members and CSTS Scientists, and reached out to experts in DG for feedback. The final pool of items will be evaluated in the SDIT population, as well as among individuals who suffered other losses known to be associated with DG, including perinatal death, suicide and homicide, as well as deaths resulting from substance abuse, criminal activity and human immunodeficiency virus (HIV).



## Family Violence

### *Child Maltreatment in US Military Communities and Families*

Another focus of the CFP involves the identification of risk factors for child maltreatment in military families, to inform prevention and intervention strategies that promote military family health, well-being and resilience. Our work has focused on child neglect, the most commonly reported type of child maltreatment type in the US and most frequently associated with child fatality. A study examining factors associated with elevated risk of child protective actions, including child victim and parent offender removal from the home, in families of US Army service members with substantiated child neglect incidents was recently published.

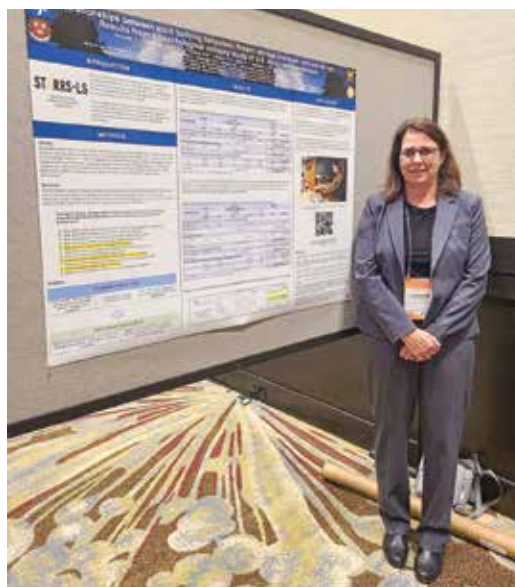
CFP also presented findings from a separate congressionally-mandated study designed to identify risk factors for child maltreatment types (i.e., neglect, physical abuse, sexual abuse, emotional abuse) in active duty families at two research conferences and in a publication describing the study, the first in a series of manuscripts from this dataset.

### *Safe Is Strong*

In 2024, the CFP developed the Safe Is Strong microsite in support of the Center's SPP. The site is designed to educate parents from military-connected families about factors that influence their family safety, and to provide resources that include recommended actions parents can take to strengthen the health and safety of their family. The site is also intended to be a tool for healthcare providers and other professionals who work with military families to help identify families that may benefit from additional resources to reduce suicide risk in parents. Dissemination efforts for Safe Is Strong expanded to include distribution of project postcards to the Pediatric Clinic at Tripler Army Medical Center. The site was also featured at the USU Department of Pediatrics' Annual Military Child Health Research Symposium and in a presentation to behavioral health providers at Cohen Veterans Network in September.

## Targeting Family Risk Associated with Unsafe Firearm Storage Practices

Unsafe firearm storage (e.g., maintaining firearms unlocked and loaded) has been associated with suicides, accidents and family violence in both military and civilian families. This Military Operational Medicine Research Program-funded study examines how four potentially modifiable family-level behaviors and attitudes relate to firearm storage practices among military-connected families with children. These factors are: (1) firearm socialization; (2) other household safety practices; (3) adult decision-making dynamics regarding firearm storage; and (4) parental misunderstanding of children's development and motivations. A manuscript describing the contribution of these family-level factors to firearm storage decision-making is being submitted for peer-reviewed publication. Items for a novel measure of parental understanding of child development and motivations were developed and are being evaluated in a general parent population. A bilingual (English and Spanish) survey is under development to assess the association of these factors and firearm storage practices, informed by feedback from focus groups conducted with military-connected family members.



*Dr. Catherine Dempsey poster presentation at National Research for the Prevention of Firearm-Related Harms conference.*

## RESEARCH IN NEUROSCIENCE AND NEUROBIOLOGY

### Trauma-Related Disorders Research

#### *Genetics and Biomarkers*

In 2024, the CSTS laboratory advanced its efforts to identify biomarkers for PTSD and depression. We reported our study, the Novel Involvement of PTSD-Associated FKBP5 in Protein Networks and Signaling Pathways, at the 2024 Amygdala, Stress, & PTSD Conference, and published our findings on the association of 5-HTTLPR and PTSD in US service members in chronic stress. We also analyzed a large dataset of 155,000 participants from the Prostate, Lung, Colorectal and Ovarian (PLCO) Randomized Screening Trial, which monitored cancer incidence and mortality. Our analysis revealed that prostate cancer (PCa) patients with pre-existing depression had significantly lower 25-year survival rates compared to both PCa patients without depression and healthy controls, emphasizing the long-term impact of depression on PCa outcomes. These findings highlight the critical need for targeted biomarker strategies to mitigate depression's effects on cancer prognosis. We presented these results at the annual USU Research Days.

#### *Exposure and Non-Exposure Treatments for Post-Trauma Nightmares and Insomnia: Nightmare Deconstruction and Reprocessing (NDR) vs. NightWare Wristband*

Individuals exposed to trauma often develop persistent nightmares, even in the absence of PTSD, that do not always respond to evidence-based treatments. CSTS is conducting a pilot trial comparing NDR, an exposure-based psychotherapy, to the NightWare prescription digital therapeutic for treatment of trauma-related nightmares and insomnia. Results from a previous CSTS pilot study suggested that NDR may be effective in decreasing the frequency and severity of nightmares and insomnia, with moderate effect sizes, and it was well-tolerated by study participants. The current study will expand on our previous work examining multiple potential

biomarkers of treatment response, including genomic and serum markers at multiple points in treatment. We are also collecting continuous physiologic data over twelve weeks of study intervention using the Empatica EmbracePlus wristband as another potential marker of treatment response. This study will continue enrollment through 2025.

#### *The Veterans Affairs (VA) National PTSD Brain Bank*

In 2014, a consortium led by the VA National Center for PTSD and co-founded by CSTS scientists established the VA PTSD Brain Bank — a multi-site human tissue bank that collects tissue donations and medical information for use in neurophysiological research on PTSD. This resource allows investigators nationwide to use the clinical and biological information stored in the bank to generate proposed mechanisms of PTSD, refine diagnostic assessment, improve treatments and ultimately develop preventive strategies for this disorder. Thus far, the Brain Bank has acquired 378 tissue samples, and 284 future donors have enrolled to support the Brain Bank by providing antemortem assessment data and medical records to accompany their future postmortem tissue donations. CSTS Scientists serve on the Tissue Access Committee and Diagnostic Assessment Core, collaborate with investigators on scientific manuscripts, and enroll future donors from the Washington, DC Armed Forces Retirement Home and Brooke Army Medical Center.

### Sleep-Related Research

#### *Chronobiology, Light and Sleep Laboratory*

Light acutely alerts and phase shifts circadian rhythms with minimal side effects, making it an ideal fatigue countermeasure; however, most lab studies of these responses employ nighttime exposures that are long duration, high intensity and suboptimal for color-rendering. In 2024, we completed a within-subjects laboratory study characterizing physiological responses to light under conditions that are more feasible in practice, elucidating response kinetics and optimal dosing parameters. Relatedly, we conducted



a field study examining the barriers and facilitators to uptake in domestic and workplace settings, to guide further refinements for maximal uptake. We also continued adapting and testing our Circadian, Light and Sleep Skills (CLASS) program in Marines to improve both sleep and mental health (and ultimately, to couple it with other interventions). Finally, the initial results of a randomized clinical trial of melatonin for enhancing response to the influenza vaccine were published, and a second paper is underway.



### *Toward Personalized Care for Insomnia: Machine Learning Algorithms to Predict Response to Insomnia Therapy*

In collaboration with Harvard Medical School, CSTS sought to develop machine learning models to predict response to insomnia medication and, separately, response to cognitive behavioral therapy for insomnia (CBT-I). The team constructed two observational longitudinal datasets using data from STARRS. The first sample comprised 7,000 Army Soldiers diagnosed with insomnia and treated with medication, while the second sample comprised 4,000 Soldiers treated with CBT-I. All Soldiers were assessed before and 6-12 weeks after initiating treatment. In both samples, only a minority of Soldiers responded to treatment, highlighting the need for predictive models. The research also found that severe baseline insomnia and younger age predicted a positive treatment response to medication, while suicidal ideation and severe baseline insomnia predicted a positive treatment response to CBT-I. These results constitute an important step toward personalized treatment planning for Soldiers and civilians with insomnia.

### *Pre-Deployment and Deployment-Related Risk and Resilience Factors for Insomnia in Military Personnel*

CSTS is using data from the Pre/Post Deployment Study (PPDS), a longitudinal component of STARRS, to identify aspects of deployment that affect risk for post-deployment insomnia and

pre-deployment factors that amplify or dampen effects of deployment on insomnia. PPDS included one assessment shortly prior to deployment and three assessments at standard intervals following deployment. Using data from 4,500 Soldiers who completed all four PPDS surveys, we found deployment stress and pre-deployment

insomnia are associated with risk for both transient and chronic post-deployment insomnia, and interpersonal stress (both family and unit stress) are stronger predictors than combat-related stressors. Next, we will evaluate effects of other pre-deployment factors (e.g., substance use and mental health) to determine if those moderate effects of deployment stress. Study findings will be transitioned to inform deployment-related policy and clinical practice guidelines for military health providers.

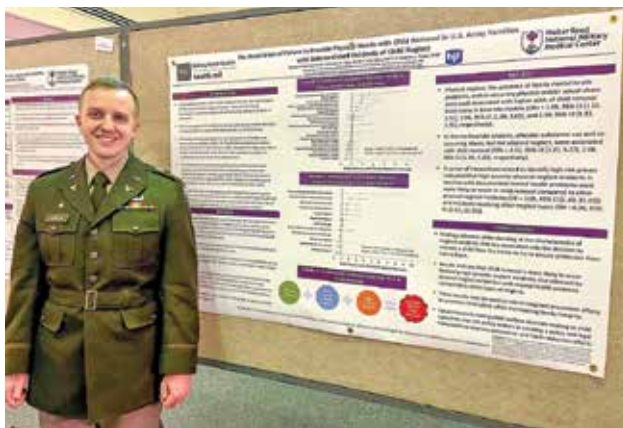
### *Tele-Sleep Health Project*

In the past year, CSTS has made significant strides, including implementing REDCap for various surveys and scripts such as the Alcohol Use Disorders Identification Test (AUDIT) and Pittsburgh Sleep Quality Index (PSQI). We have successfully submitted IRB proposals and expanded the research team by hiring a study coordinator and research assistant. Collaborations with the University of Maryland – Baltimore, the Integrated Referral Management and Appointing Center (IRMAC) and Medbridge have strengthened, facilitating improved study processes. IRMAC will supply lists of patients referred for obstructive sleep apnea (OSA) consultations to aid in recruitment. Participants randomized to receive OSA telehealth care will benefit from remote consultations with sleep specialists and receive Food and Drug Administration-approved diagnostic and treatment equipment, with ongoing support from a sleep navigator. The study will span approximately 90 days post-positive airway pressure treatment initiation. Over four years, about 160 participants from USU and WRNMMC will engage in screenings, evaluations and telehealth consultations, enhancing their understanding of sleep health.

# Education and Training

## MENTORING PROJECTS AT CSTS

CSTS provides mentorship experiences for USU medical students (including Capstone experiences), National Capital Consortium (NCC) Child and Adolescent Psychiatry fellows, and NCC General Psychiatry residents. Under the guidance of senior researchers, mentees investigate critical issues related to child and family stress and trauma, including bereavement, firearm storage practices and child maltreatment. The work has resulted in presentations at national and international professional conferences and peer-reviewed publications, including an article on predictors of child and parent removal from Army families when child neglect occurred. Mentees have authored or co-authored six conference presentations on topics including the impact of neglect types on child and parental removal from homes within the Army, the association of belief in a “just world” with PGD in 9/11 bereaved parents and strategies for reducing firearm-related injuries through shared decision-making. These experiences enhance mentees’ research skills, broaden their understanding of stress and trauma in both children and adults, and inform their careers in psychiatry.



*Dr. Nemcek, Child and Adolescent Psychiatry Fellow, poster presentation, Walter Reed Research and Innovation Month Clinical Award.*

## DISASTER RESPONSE AND PUBLIC EDUCATION

The Center was sought out for resources to protect mental health of disaster responders, healthcare personnel, children and families and leaders impacted by devastating weather events, such as Hurricane Helene, acts of mass violence, like the shootings at Abundant Life Christian School, and industrial accidents, such as the ship collision that led to collapse of the Francis Scott Key Bridge. Following these events, the Center provided public and disaster mental health educational fact sheets and other resources to responders and other organizations working to protect mental health and foster resilience among impacted communities. Center Scientists also provided education through consultation to help various affected stakeholders address unique and evolving aspects of these and other disasters, including the impact of exposure to human remains, evacuation and displacement, altered feelings of safety and grief and loss.

## NEUROSCIENCE MODULE FOR PRE-CLERKSHIP USU MEDICAL STUDENTS

The Neuroscience and Behavior Module is a core eight-week course for first-year medical students at USU. It integrates various disciplines to teach neuroscience principles. Students learn to recognize, diagnose and manage neurological and psychiatric conditions. The module aims to provide a strong foundation in neuroscience for future military medical officers. The key features of the Module in 2024 were:

- **Multidisciplinary approach:** Combines neuroscience with military medicine, medical history and health systems science.
- **Hands-on learning:** Includes simulated patient experiences and practice of neurologic and mental status examinations.
- **Focus on clinical skills:** Emphasizes effective, safe and patient-centered care.

- **Innovative teaching:** Utilizes distance, hybrid and in-person learning methods.
- **High-quality education:** Consistently ranks among the best modules, with 100% student success rates and 100% satisfaction rates.
- **Continuous improvement:** Regularly updates lecture content and utilizes embedded questions for assessment.
- **Rigorous assessment:** Exam questions are carefully designed and aligned with both module and university learning objectives.

## EDUCATION AND TRAINING IN SUPPORT OF US AFRICA COMMAND

Dr. Benedek and Col Kumer were invited by the US Embassy in Mozambique and the Mozambique Ministry of Defence to be expert panelists at their Mental Health International Symposium for the Armed Forces. By request, they provided operational behavioral health training in person to the Mozambique Army and also submitted two briefings for the symposium: “Managing the Military Traumatic Stress Response: Guiding Principles for Peers, Leaders and Clinicians” and “Psychological First Aid in the Military Operational Environment: Benefits and Limitations.” Continuing a theme of providing partner nation support in Africa, Col Kumer led



*CSTS Team at International Symposium in Senegal.*

a Military Operational Behavioral Health Mobile Training Team to Dakar, Senegal, along with CDR La Croix, Dr. Benedek and MAJ Nevers of the Indiana National Guard and CDP, USU. The engagement was sponsored by the US Embassy in Senegal and resulted in the team conducting behavioral health training with 25 military psychiatrists and nurses from the Senegal Defense Forces.

## EDUCATION AND TRAINING IN COMBAT AND OPERATIONAL STRESS CONTROL: OPERATION BUSHMASTER

In 2024, CSTS Scientists provided training in Combat and Operational Stress Control as a core component in military medical education. In line with USU's mission to prepare uniformed health professionals to support the readiness of the US Armed Forces, CSTS Scientists engaged in curriculum preparation, faculty development and direct teaching as part of the annual medical field training exercise called Operation Bushmaster. This undertaking includes preparing senior USU and international students, as well as active-duty residents, to operate in forward medical units in a complex front-line simulation over four days, culminating in a mass casualty event. Students treated a continuous stream of battlefield casualties and non-battle injuries, as well as conducted public health outreach activities while on a simulated combat deployment. Differentiating the assessment, disposition and treatment of psychiatric illnesses were core skills uniquely taught on the field.



*Operation Bushmaster annual medical field training exercise.*



## DISASTER AND PREVENTIVE PSYCHIATRY COURSE

The Center's international reputation for expertise in military and disaster psychiatry led to a partnership with the American Psychiatric Association to develop the world's first (and only) online interactive training in "Disaster and Preventive Psychiatry: Protecting Health and Fostering Community Resilience." The course is free and offers eight continuing education credits, providing learners with critical information on topics such as the psychological and behavioral impact of different types of disaster, understanding aspects of risk and protection, evidence-based actions for protecting the mental health of disaster responders, using communication and messaging to protect health and leadership behaviors to foster community recovery. This unique course has been widely praised by national and global partners, cited in textbooks and shared broadly throughout the national and global disaster community through Center partnerships with the Administration for Strategic Preparedness and Response, the Substance Abuse and Mental Health Services Administration (SAMHSA), the National Association of State Mental Health Program Directors (NASMHPD), the Five Eyes Mental Health Research and Innovation Collaboration (MHRIC), the North Atlantic Treaty Organization (NATO), and the United Nations (UN).



## US DEPARTMENT OF VETERAN AFFAIRS (VA) RESEARCH-IN-RESIDENCE FELLOWSHIPS

The VA/STARRS-LS Researcher-In-Residence Fellowship Program is now in its second year. In 2023, the STARRS-LS research team, in collaboration with our partners at Harvard Medical School,

established a pioneering interagency research fellowship program with the VA. The goal of the program is to partner with early career VA researchers and explore research-based solutions for service members vulnerable to suicide as they transition from active duty to veteran status. In 2024, we welcomed two additional fellows who will collaborate part-time with the STARRS-LS researchers for a two-year term. Dr. Amar Mandavia from VA Boston and Dr. Marcus Wild from the VA's Waco Regional Office were selected for two-year fellowships. For further details, please refer to the VA's Health Services Research and Development website featuring the Researcher-In-Residence Program: <https://www.hsrd.research.va.gov/centers/core/sprint/starrs-ls.cfm>. Moving forward, STARRS-LS researchers hope to work with the DoD to develop a similar fellowship program with DoD research scientists.

## TRAINING TO SUPPORT RESEARCH

The Center trains and educates research support staff, such as Research Assistants (RAs). In 2024, a team of nine RAs supported research efforts at CSTS. RAs provide support to scientists and team members on a variety of projects, and learn by working with CSTS scientists, biostatisticians and program managers. The RAs conduct literature reviews, participate in study participant recruitment and data collection, assist in data entry and quality control and develop tables and graphics for study findings. RAs also provide administrative support for meetings, including preparing meeting minutes. While at CSTS, RAs acquire valuable research skills, including developing posters for presentation at professional conferences. RAs are offered professional development opportunities, including attending workshops and assisting with manuscript preparation for publication in peer-reviewed scientific journals. Following their tenure at CSTS, RAs often further their education by pursuing advanced degrees. Former Center RAs have engaged in graduate study at institutions including: Yale University, Notre Dame University, Johns Hopkins University, Duke University, Columbia University, Georgetown University, London



School of Hygiene and Tropical Medicine, University of Maryland, George Washington University, Catholic University, Florida State University, University of Nebraska – Lincoln and USU. Opportunities that RAs have pursued following their experience at CSTS have included:

- PhD programs in psychology and related behavioral science fields
- Medical school
- Physician assistant school
- Law school
- Master's degree programs in psychology, counseling, public health and social work
- Training positions at the National Institutes of Health
- Careers with the Federal Bureau of Investigation

In 2024, CSTS continued its professional development workshops designed to educate and facilitate discussions among the Center staff on topics critical to success. Workshops included discussions on behavioral health careers in the military, managing psychological consequences in disaster populations and workplace etiquette.

## **DISSEMINATION AND IMPLEMENTATION OF HEALTH AND RESEARCH KNOWLEDGE**

### **Fact Sheets, Infographics and Pocket Cards**

Over many years, the Center has developed and disseminated brief, just-in-time, action-oriented resources to address public health and disaster mental health issues of concern. The Center is well known for its disaster education fact sheets and pocket cards, which explain complex topics in a way that is easy to understand and provide information that is easy to use, particularly during times of heightened stress.

The pocket card “Helping Others Calm an Acute Stress Response” has been widely utilized by responders and community members in a variety of recent and ongoing disaster events, including hurricanes, mass violence, bridge collapse and war. To help address the issue of moral distress and injury that may result from exposure to various extreme

events, the Center developed “Understanding Moral Injury.” This fact sheet briefly explains moral injury and its impact, and provides strategies to support individuals experiencing moral injury.

### **Website**

CSTS's website is a primary tool that is used to further the goal of disseminating relevant and timely information to a wide range of stakeholders ([www.CSTSonline.org](http://www.CSTSonline.org)). Materials available on the website include summaries of current research activities, publication citations, newsletters, conference reports and a searchable repository of CSTS disaster mental health education fact sheets. The website includes a “What's New” section that highlights recent disaster education materials, research initiatives, publications, conference summaries and announcements of upcoming events.

In 2024, the website saw 44,528 users from 156 countries around the world. Among these users, 27,292 (61%) were from the US. The largest number of views occurred on Wednesday, February 28th, with 826 users. This past year, the site received 114,639 page views across 739 pages. The CSTS SPP website launched Season 2 of the podcast series, “Let's Talk About Your Guns.” The “Let's Talk About Your Guns” podcast page had 621 views.

### **Social Media**

In 2024, the Center continued to grow its online presence through the use of social media. Social media resources allowed for the timely dissemination of content relevant to CSTS partners and the public. CSTS social media engaged users from ten different countries across the globe on X (formerly known as Twitter), Facebook and LinkedIn. The Center has a social media team that works to develop weekly and monthly public health outreach campaigns and other types of communications materials. Moving forward into 2025, the Center is exploring new ways to increase its social media presence across multiple platforms. CSTS encourages people to visit and follow our postings to stay up to date on new activities, resources and publications. “Like” CSTS on Facebook and follow CSTS on X (@CSTS\_USU) and LinkedIn.

# Consultations



## GLOBAL MENTAL HEALTH

- **Ukraine Mental Health Support.** Weekly consultations continued between CSTS, Walter Reed Army Institute of Research (WRAIR) and Harvard University to support Ukrainian mental health leaders amid ongoing conflict.
- **Israel Defense Forces (IDF) Mental Health Support.** Dr. Biggs provided recommendations on psychological care for IDF military body handlers through Bar-Ilan University.
- **Republic of Fiji Military Forces Mental Health Training.** CSTS partnered with Mr. Klomp (Geneva Office for Human Rights Education, Pacific Area) to provide guidance on mitigating the impact of extended military deployments on soldiers and their families.
- **Brazil Flood Response.** In response to historic floods affecting more than two million people, Dr. Morganstein provided a live-streamed disaster mental health grand rounds to healthcare professionals in Brazil. The session has been viewed nearly 1,000 times and continues to support long-term recovery.
- **National Defense Medical Center, Taiwan, Collaboration.** Dr. West participated in high-level discussions on potential research and training collaborations between CSTS and Taiwan's medical defense leaders.

## ■ Brain Health Summit in Warsaw, Poland.

Drs. Capaldi and West advised on mental health strategies for warfighters in Ukraine during this international symposium organized by US Army Medical Research and Development Command and Aspen Medical.

## NATIONAL MENTAL HEALTH

- **Armed Forces Medical Examiner System (AFMES) Collaboration.** CSTS consulted with AFMES leadership to develop a mental health protection system for forensic pathologists and mortuary specialists.
- **Kansas City Mass Shooting Response.** Following the tragic February 14, 2024, mass shooting, CSTS provided behavioral health consultation to local leadership, including Dr. Gist of the Kansas City, MO Fire Department. Continued engagement supports long-term recovery planning.
- **Department of State (DoS) Mental Health Support.** CSTS experts, including Drs. Benedek, Ursano and Morganstein, contributed specialized consultation to enhance mental healthcare systems for 75,000+ globally dispersed DoS personnel.

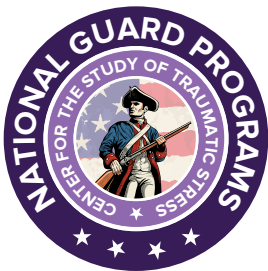


*Drs. Vincent Capaldi and Curt West (middle) in Poland for the Warsaw Brain Health Symposium.*



- **Federal Emergency Management Agency (FEMA) Urban Search & Rescue Behavioral Health Initiative.** Dr. Morganstein delivered a presentation on responder well-being and continues discussions to shape FEMA's behavioral health response plan for disaster rescue teams.
- **Smithsonian Institution Workplace Stress Consultation.** Dr. Ursano engaged with the Smithsonian Institution, providing expertise on handling workplace stress events.
- **Fostering Resilience and Managing Emotions (FRAME) Training at WRAIR.** Dr. Biggs contributed consultation on the FRAME course focused on handling human remains.
- **Defense Support of Civil Authorities (DSCA) Consultation.** Ongoing monthly consultations addressed mortuary affairs and mental health coordination across multiple military and federal agencies. Additionally, CSTS leaders provided support and educational fact sheets for Maryland authorities following the Key Bridge collapse in Baltimore.

## NATIONAL GUARD PROGRAMS (NGP)



### National Guard Bureau (NGB) Integrated Primary Prevention (IPP)

During its first full year, the IPP team collaborated with the NGB to support national IPP efforts. The team developed a Quality Assurance Check (QAC) process and guide to strengthen individual Comprehensive Integrated Primary Prevention (CIPP) plans. The IPP team reviewed 34 plans and conducted 26 feedback sessions. The team consulted NGB on IPP products, presented at IPP Workforce (IPPW) internal meetings, and attended the IPPW annual symposium. Representatives attended quarterly NGB forums to assist in developing strategic plans for the IPPW. The team presented QAC findings at four national conferences through poster and oral presentations. Looking forward, the IPP team will continue to support the development of the CIPP plan. The team is expanding supportive efforts by

creating additional educational materials and offering additional opportunities for consultation with the team of scientists.

### Army National Guard Behavioral Health (ARNG BH) Program

The ARNG BH Program aims to optimize behavioral health readiness among the ARNG, increase access to care and increase quality of care through standardization of evidenced-informed practices, policies and community partnerships. In 2024, the ARNG BH program expanded its efforts under three main areas of focus: Metrics and Data Collection, Standardization and Quality Improvement, and Program Structure and Capacity Enhancement. Key achievements included comprehensive analyses of existing ARNG BH data sources and improvement of Medical Electronic Data (for) Care History And Readiness Tracking (MEDCHART) reporting for better capture of key metrics. In addition, the team supported the creation of the first-ever comprehensive roster of ARNG BH providers, development of a program website and purchased a platform upon which to build a comprehensive training curriculum. The team provided support for planning and execution of the Behavioral Health Training Event (BHTE) for 2024 as well as planning for the 2025 event.

### NGP Data & Evaluation

The Data and Evaluation department supports the NGB's IPP and the ARNG BH Program. Work assisting the IPP in 2024 included analyzing multiple data sources to understand and visualize state-level and NG-wide trends for risk/protective factors and outcomes of interest and providing feedback on the 54 States, Territories + District (S/T/DC) CIPP plans. The team developed a presentation for NGB on the differences between and how to utilize the Pennsylvania State University Clearinghouse for Military Family Readiness and RAND Corporation research database to support implementing evidence-based prevention activities that address harmful behaviors within the NG. The team also presented a talk titled "Data-Driven" to S/T/DC. ARNG BH Program work included developing a survey and interview guide assessing ARNG BH provider and

service member needs. In addition, the team developed a form for behavioral health providers requesting behavioral health consultation and created heat maps of S/T/DC behavioral health provider-to-service member ratios.

### NGP Education & Training

The Education and Training team was established in 2024 to provide support to IPP and ARNG BH teams by developing educational products and training curricula, conducting content review and editing and coordinating training events. Key accomplishments included organizing a CSTS site

visit to the National Guard Memorial Museum and presenting the findings at the National Guard Presents meeting. The team provided guidance in the development of the National Guard Handbook and laid the groundwork for the 2025 Forum on Health & National Security. Additionally, the team supported IPP by reviewing QAC guides, helping with the Project Safe Guard Generation III rollout, and expanding the training curriculum. This included assisting the ARNG BH team plan the 2025 BHTE, and collaborating with other NGP teams to initiate the development of a dedicated website and design of a representative image for the program.

## Dr. Brian Flynn's Long Service in CSTS Leadership

In August, Dr. Brian Flynn stepped back from his 22 years on the CSTS Leadership Team. Before joining USU/CSTS, he served 31 years in the US Public Health Service (USPHS), retiring at the rank of Rear Admiral/Assistant Surgeon General. During his time at CSTS, Dr. Flynn brought invaluable experience from his senior USPHS management roles, especially in the development, operation and supervision of the federal government's disaster behavioral health program. From his years of consultation, policy development

and program implementation, Dr. Flynn added significantly to the Center's expertise in domestic disaster preparedness, response and recovery. Dr. Flynn's unique background contributed to the Center's research, training, education and consultation portfolio. In addition, he created new partnerships that remain central to the leadership of CSTS. Dr. Flynn continues as an Adjunct Professor and has remained available to contribute his expertise and unique perspective as needed.



*Dr. Brian Flynn retires after 22 years at CSTS.*



*Dr. Robert Ursano honoring Dr. Brian Flynn at his retirement ceremony.*

# Publications

(Names in bold text are CSTS personnel)

## JOURNAL ARTICLES

- Boese, M., **Berman, R. Y.**, Qiu, J., Spencer, H. F., Radford, K. D., & **Choi, K. H.** (2024). Effects of mild closed-head injury and subanesthetic ketamine infusion on microglia, axonal injury, and synaptic density in Sprague-Dawley rats. *International Journal of Molecular Science*, 25(8). <https://doi.org/10.3390/ijms25084287>
- Campbell-Sills, L., **Choi, K. W.**, Strizver, S. D., Kautz, J. D., Papini, S., **Aliaga, P. A.**, Lester, P. B., **Naifeh, J. A.**, Ray, C., Kessler, R. C., **Ursano, R. J.**, Stein, M. B., & Bliese, P. D. (2024). Interactive effects of genetic liability and combat exposure on risk of alcohol use disorder among US service members. *Drug and Alcohol Dependence*, 264, 112459. <https://doi.org/10.1016/j.drugalcdep.2024.112459>
- Cleaves, E. S.** (2024). Supervising individual psychotherapy: The guide to “good enough.” *Psychiatry*, 87(2), 200-202. <https://doi.org/10.1080/00332747.2024.2348422>
- Collier, L., Seah, C., Hicks, E. M., Holtzheimer, P. E., Krystal, J. H., Girgenti, M. J., Huckins, L. M. & Johnston, K. J. A. (**Ursano, R. J.** as a contributor) (2024). The impact of chronic pain on brain gene expression. *medRxiv*. <https://doi.org/10.1101/2024.05.20.24307630>
- Daskalakis, N. P., Iatrou, A., Chatzinakos, C., Jajoo, A., Snijders, C., Wylie, D., DiPietro, C. P., Tsatsani, I., Chen, C. Y., Pernia, C. D., Soliva-Estruch, M., Arasappan, D., Bharadwaj, R. A., Collado-Torres, L., Wuchty, S., Alvarez, V. E., Dammer, E. B., Deep-Soboslay, A., Duong, D. M.,...Ressler, K. J. (**Ursano, R. J.** as contributor) (2024). Systems biology dissection of PTSD and MDD across brain regions, cell types, and blood. *Science*, 384(6698), eadh3707. <https://doi.org/10.1126/science.adh3707>
- Dempsey, C. L.**, Ao, J., **Georg, M. W.**, **Aliaga, P. A.**, Brent, D. A., **Benedek, D. M.**, Zuromski, K. L., Nock, M. K., Heeringa, S. G., Kessler, R. C., Stein, M. B., & **Ursano, R. J.** (2024). Suicide without warning: Results from the Army Study to Assess Risk and Resilience in Servicemembers (STARRS). *Journal of Mood & Anxiety Disorders*, 7. <https://doi.org/10.1016/j.xjmad.2024.100064>
- Dempsey, C. L.**, **Benedek, D. M.**, **Spangler, P. T.**, **West, J. C.**, Bossarte, R. M., Nock, M. K., Zuromski, K. L., **Georg, M. W.**, **Ao, J.**, **Haller, K.**, **Probe, D. M.**, & **Ursano, R. J.** (2024). Gun ownership for safety/protection and unsecured firearm storage practices: Suicide risk and prevention among U.S. Army servicemembers. *American Journal of Preventive Medicine*. <https://doi.org/10.1016/j.amepre.2024.10.011>
- Fisher, J. E.**, **Zhou, J.**, **Blumhorst, A. L.**, **Ogle, C. M.**, **Sumberg, L.**, & **Cozza, S. J.** (2024). Pathways between grief, depression, hopelessness, reasons for living, and suicidal ideation in bereaved individuals. *Journal of Psychiatric Research*, 179, 351-359. <https://doi.org/10.1016/j.jpsychires.2024.08.033>
- Flynn, B. W.** (2024). Finding a place to stand: Developing self-reflective institutions, leaders, and citizens. *Psychiatry*, 87(1), 101-103. <https://doi.org/10.1080/00332747.2024.2308478>
- Gabbay, F. H.**, **Wynn, G. H.**, **Georg, M. W.**, Gildea, S. M., Kennedy, C. J., King, A. J., Sampson, N. A., **Ursano, R. J.**, Stein, M. B., & Wagner, J. R. (2024). Toward personalized care for insomnia in the US Army: A machine learning model to predict response to cognitive behavioral therapy



Mona Al-Bizri, Rehana Naik Olson, Sonia Warrior and Dr. Quinn Biggs meeting with mortuary affairs soldiers at Fort Gregg-Adams, Virginia.





*Evan Salerno, Drs. Joscelyn Fisher, Christin Ogle, Stephen Cozza and Alexander Rice representing the CSTS Child and Family Program at the Military Child Education Coalition Global Summit, Washington DC.*

- for insomnia. *Journal of Clinical Sleep Medicine*, 20(6), 921-931.
- He, Q., Wang, W., Xu, D., Xiong, Y., Tao, C., You, C., Ma, L., & Ma, J. (Ursano, R. J. as contributor) (2024). Potential causal association between gut microbiome and posttraumatic stress disorder. *Translational Psychiatry*, 14(1), 67. <https://doi.org/10.1038/s41398-024-02765-7>
- Howe, E. G. (2024). Being available to patients. *Capital Psychiatry*, 15-17.
- Howe, E. G. (2024). Exceptional critical concerns for patients who are facing aging and death. *Directions in Psychiatry*, 6 Sec. <https://www.hatherleigh.com/courses/directions-in-psychiatry-vol-44>
- Howe, E. G. (2024). How should therapists treat patients who are so altruistic they regularly harm themselves for the sake of others? *Innovative Clinical Neuroscience*, 21(4-6), 14-18.
- Howe, E. G. (2024). A new psychotherapy that may treat PTSD in one session. *Frontiers in Psychiatry*, 15, 1440113. <https://doi.org/10.3389/fpsy.2024.1440113>
- Howe, E. G. (2024). New ways to help patients worst off. *Journal of Clinical Ethics*, 35(1), 1-7. <https://doi.org/10.1086/728098>
- Howe, E. G. (2024). Psychotherapeutic approaches: Hopefully, globally effective. *Frontiers in Psychiatry*, 15, 1322184. <https://doi.org/10.3389/fpsy.2024.1322184>
- Howe, E. G. (2024). Should providers advocate for their patients? *Journal of Clinical Ethics*, 35(2), 77-84. <https://doi.org/10.1086/729224>
- Howe, E. G. (2024). Should providers ask family members what they want when establishing surrogate decision-making? *Journal of Clinical Ethics*, 35(3), 147-154. <https://doi.org/10.1086/730874>
- Howe, E. G. (2024). Should providers engage in religious discussions, and if they should, then with whom? *Journal of Clinical Ethics*, 35(4), 217-223. <https://doi.org/10.1086/732143>
- Howe, E. G. (2024). Teaching of medical ethics regarding military, genetic, reproductive, and student ethics, and the Holocaust at the Uniformed Services University of the Health Sciences (USUHS) during its first fifty years, Part 1. *Military Medicine*. <https://doi.org/10.1093/milmed/usae546>
- Howe, E. G. (2024). Teaching of medical ethics regarding military, genetic, reproductive, and student ethics, and the Holocaust at the Uniformed Services University of the Health Sciences (USUHS) during its first fifty years, Part 2. *Military Medicine*. <https://doi.org/10.1093/milmed/usae546>
- Howe, E. G. (2024). Teaching psychiatry when teaching the mental status exam. *Capital Psychiatry*, 68-69.
- Hu, X. Z., Ursano, R. J., Benedek, D. M., Li, X., & Zhang, L. (2024). Association of 5-HTTLPR with post-traumatic stress disorder in US service members. *Chronic Stress*, 8. <https://doi.org/10.1177/24705470241245497>
- Hukovskyy, O., West, J. C., Morganstein, J. C., Augusterfer, E. F., Benedek, D. M., Boyko, O., Ursano, R. J., & Adler, A. B. (2024). The combat path: Sustaining mental readiness in Ukrainian soldiers. *Parameters*, 54(2).
- Katrinli, S., Wani, A. H., Maihofer, A. X., Ratanatharathorn, A., Daskalakis, N. P., Montalvo-Ortiz, J., Núñez-Ríos, D. L., Zannas, A. S., Zhao, X., Aiello, A. E., Ashley-Koch, A. E., Avetyan, D., Baker, D. G., Beckham, J. C., Boks, M. P., Brick, L. A., Bromet, E., Champagne, F. A., Chen,

- C. Y.,...**Ursano, R. J.**,... Logue, M. W. (2024). Epigenome-wide association studies identify novel DNA methylation sites associated with PTSD: A meta-analysis of 23 military and civilian cohorts. *Genome Medicine*, 16(1), 147. <https://doi.org/10.1186/s13073-024-01417-1>
- Kennedy, C. J., Kearns, J. C., Geraci, J. C., Gildea, S. M., Hwang, I. H., King, A. J., Liu, H., Luedtke, A., Marx, B. P., Papini, S., Petukhova, M. V., Sampson, N. A., Smoller, J. W., Wolock, C. J., Zainal, N. H., Stein, M. B., **Ursano, R. J.**, Wagner, J. R., & Kessler, R. C. (2024). Predicting suicides among US Army soldiers after leaving active service. *JAMA Psychiatry*, 81(12), 1215-1224. <https://doi.org/10.1001/jamapsychiatry.2024.2744>
- Kessler, R. C., Bossarte, R. M., Hwang, I., Luedtke, A., **Naifeh, J. A.**, Nock, M. K., Petukhova, M., Sadikova, E., Sampson, N. A., Sverdrup, E., Zubizarreta, J. R., Wager, S., Wagner, J., Stein, M. B., & **Ursano, R. J.** (2024). A prediction model for differential resilience to the effects of combat-related stressors in US army soldiers. *International Journal of Methods in Psychiatric Research*, 33(4), e70006. <https://doi.org/10.1002/mpr.70006>
- Krantz, D. S., **Gabbay, F. H.**, Belleau, E. A., **Aliaga, P. A.**, Wynn, G. H., Stein, M. B., **Ursano, R. J.**, & **Naifeh, J. A.** (2024). PTSD, comorbidities, gender, and increased risk of cardiovascular disease in a large military cohort. *medRxiv*. <https://doi.org/10.1101/2024.04.13.24305769>
- Landvater, J., Kim, S., Caswell, K., Kwon, C., Odafe, E., Roe, G., Tripathi, A., Vukovics, C., Wang, J., Ryan, K., Cocozza, V., Brock, M., Tchopov, Z., Tonkin, B., **Capaldi, V.**, Collen, J., Creamer, J., Irfan, M., Wickwire, E. M.,...Hinds, S. R. (2024). Traumatic brain injury and sleep in military and veteran populations: A literature review. *NeuroRehabilitation*, 55(3), 245-270. <https://doi.org/10.3233/nre-230380>
- Lee, R. U., Watson, N. L., **Glickman, G. L.**, White, L., Isidean, S. D., Porter, C. K., Hollis-Perry, M., Walther, S. R., Maiolatesi, S., Sedegah, M., Ganeshan, H., Huang, J., Boulifard, D. A., Ewing, D., Sundaram, A. K., Harrison, E. M., DeTizio, K., Belmonte, M., Belmonte, A.,...Danko, J. (2024). A randomized clinical trial of the impact of melatonin on influenza vaccine: Outcomes from the melatonin and vaccine response immunity and chronobiology study (MAVRICS). *Human Vaccines and Immunotherapies*, 20(1), 2419742. <https://doi.org/10.1080/21645515.2024.2419742>
- Mairson, T. M., & **Howe, E.** (2024). Addressing structural audism in medicine: How those who are Deaf and hard of hearing are marginalized in healthcare. *Psychiatry*, 87(1), 2-6. <https://doi.org/10.1080/00332747.2023.2286844>
- Mash, H. B. H.**, **Fullerton, C. S.**, Adler, A. B., **Morganstein, J. C.**, **Blumhorst, A.**, **La Croix, C. L.**, **Biggs, Q. M.**, & **Ursano, R. J.** (2024). COVID-19 personal experiences and posttraumatic stress in National Guard service members. *Military Medicine*, usae478. <https://doi.org/10.1093/milmed/usae478>
- Mash, H. B. H.**, **Fullerton, C. S.**, Adler, A. B., **Morganstein, J. C.**, **Reissman, D. B.**, **Biggs, Q. M.**, **La Croix, C. L.**, **Blumhorst, A.**, & **Ursano, R. J.** (2024). Types of COVID-19 disaster work and psychological responses in National Guard service members. *Military Medicine*, 189(11-12), e2692-e2699. <https://doi.org/10.1093/milmed/usae228>
- Matta, S. E., **La Croix, C.**, Tanev, K., & Stern, T. A. (2024). Pharmacologic management of the sequelae of traumatic brain injuries. *The Primary Care Companion for CNS Disorders*, 26(4), 56086.
- Matta, S. E., **La Croix, C.**, Walterfang, M., Tanev, K. S., & Stern, T. A. (2024). Traumatic brain injuries: Manifestations, evaluation, management, and outcomes. *Primary Care Companion on CNS Disorders*, 26(3). <https://doi.org/10.4088/PCC.23f03667>
- McCarroll, J. E.**, **Fisher, J. E.**, **Cozza, S. J.**, **Mash, H. H.**, **Biggs, Q. M.**, **Flynn, B. W.**, & **Walsh, T.** (2024). Notification, viewing the body, and social and cultural considerations after traumatic death: A systematic literature review. *Disaster Medicine and Public Health Preparedness*, 18, e256. <https://doi.org/10.1017/dmp.2024.125>
- Meng, X., Navoly, G., Giannakopoulou, O., Levey, D. F., Koller, D., Pathak, G. A., Koen, N., Lin, K., Adams, M. J., Rentería, M. E., Feng, Y., Gaziano, J. M., Stein, D. J., Zar, H. J., Campbell, M. L., van Heel, D. A., Trivedi, B., Finer, S., McQuillin, A.,...**Ursano, R. J.**,...Kuchenbaecker, K. (2024). Multi-ancestry genome-wide association study of major depression aids locus discovery, fine mapping, gene prioritization and causal inference. *Nature*

- Genetics*, 56(2), 222-233. <https://doi.org/10.1038/s41588-023-01596-4>
- Naifeh, J. A., Ursano, R. J., Shor, R., Mash, H. B. H., Aliaga, P. A., Fullerton, C. S., Nock, M. K., Kao, T. C., Sampson, N. A., Kessler, R. C., & Stein, M. B.** (2024). Undetected suicide attempts among U.S. soldiers: Results from the Army Study to Assess Risk and Resilience in Servicemembers (Army STARRS). *Psychological Medicine*, 1-9. <https://doi.org/10.1017/s0033291724001028>
- Naifeh, J. A., Ursano, R. J., Stein, M. B., Mash, H. B. H., Aliaga, P. A., Fullerton, C. S., Shor, R., Kao, T. C., Sampson, N. A., & Kessler, R. C.** (2024). Optimism, sociability, and the risk of future suicide attempt among US Army soldiers. *Military Medicine*, 189(7-8), e1642-e1652. <https://doi.org/10.1093/milmed/usad457>
- Naifeh, J. A., Ursano, R. J., Stein, M. B., Wang, J., Mash, H. B. H., Aliaga, P. A., Fullerton, C. S., Dinh, H. M., Kao, T. C., Sampson, N. A., & Kessler, R. C.** (2024). Prospective association of attachment style with suicide attempts among US Army soldiers. *Psychological Medicine*, 54(4), 785-793. <https://doi.org/10.1017/s0033291723002489>
- Nievergelt, C. M., Maihofer, A. X., Atkinson, E. G., Chen, C. Y., **Choi, K. W.**, Coleman, J. R. I., Daskalakis, N. P., Duncan, L. E., Polimanti, R., Aaronson, C., Amstadter, A. B., Andersen, S. B., Andreassen, O. A., Arbisi, P. A., Ashley-Koch, A. E., Austin, S. B., Avdibegović, E., Babić, D., Bacanu, S. A.,...Koenen, K. C. (2024). Genome-wide association analyses identify 95 risk loci and provide insights into the neurobiology of post-traumatic stress disorder. *Nature Genetics*, 56(5), 792-808. <https://doi.org/10.1038/s41588-024-01707-9>
- Nock, M. K., Jaroszewski, A. C., Deming, C. A., Glenn, C. R., Millner, A. J., Knepley, M., **Naifeh, J. A.**, Stein, M. B., Kessler, R. C., & **Ursano, R. J.** (2024). Antecedents, reasons for, and consequences of suicide attempts: Results from a qualitative study of 89 suicide attempts among Army soldiers. *Journal of Psychopathology and Clinical Science*, 134(1), 6-17. <https://doi.org/10.1037/abn0000935>
- Ogle, C. M.**, Harmon-Darrow, C., Fedina, L., Nichols, D., Mulford, C. F., & Backes, B. L. (2024). Operational definitions of poly-victimization: A scoping review. *Trauma, Violence, & Abuse*, 25(4), 3360-3376. <https://doi.org/10.1177/15248380241246522>
- Ogle, C. M., Zhou, J., Fisher, J. E., Aliaga, P. A., Rose, V. C., Huleatt, W. J., Chiarantona, K. H., Naifeh, J. A., Mash, H. B. H., Fullerton, C. S., Ursano, R. J., & Cozza, S. J.** (2024). Overview and design of the Child Maltreatment in Military Families Life Course Study. *Psychiatry*, 87(2), 149-160. <https://doi.org/10.1080/00332747.2023.2258750>
- Pineles, S. L., Ni, P., Pandey, S., Japuntich, S. J., Cesare, N., **Shor, R.**, Carpenter, J. K., Gregor, K., Joos, C. M., Blumenthal, T. D., & Rasmusson, A. M. (2024). Tobacco withdrawal-induced changes in sensorimotor filtering as a predictor of smoking lapse in trauma-exposed individuals. *Addictive Behaviors*, 148, 107868. <https://doi.org/https://doi.org/10.1016/j.addbeh.2023.107868>
- Quartana, P. Q., Beymer, M. R., Gomez, S. A. Q., Adler, A. B., Jackson Santo, T., **Thomas, J. L.** & Millikan Bell, A. (2024). *Military Medicine*, 189(3-4), 3878-3887. <https://doi.org/10.1093/milmed/usad350>
- Raut, S. B., Joly, F., Haass, N. K., Eri, R., Canales, J. J., **Benedek, D. M.**, **Ursano, R. J.**, & Johnson, L. R. (2024). The clinically relevant MEK inhibitor mirdametnib combined with D-cycloserine and prediction error disrupts fear memory in PTSD models. *Translational Psychiatry*, 14(1), 492. <https://doi.org/10.1038/s41398-024-03190-6>
- Regier, D. A.** (2024). Fifty years of psychiatric classification and epidemiology interactions: What is a mental disorder? *Psychiatry*, 87(4), 279-297. <https://doi.org/10.1080/00332747.2024.2395755>
- Rice, A. J., Fisher, J. E., & Cozza, S. J.** (2024). Coping after violent loss: A systematic literature review and organizing model. *Journal of Loss and Trauma*, 1-61. <https://doi.org/10.1080/15325024.2024.2415706>
- Rønning, L., Anyan, F., Hjemdal, O., Bøe, H. J., Espetvedt Nordstrand, A., **Mash, H. B. H.**, & **Naifeh, J. A.** (2024). Exploring heterogeneity in PTSD symptoms and associated predictors and outcomes in Afghanistan veterans: A latent profile analysis. *Military Psychology*, 1-12. <https://doi.org/10.1080/08995605.2024.2345580>
- Rønning, L., **Shor, R.**, Anyan, F., Hjemdal, O., Jakob Bøe, H., **Dempsey, C. L.**, & Espetvedt Nordstrand, A. (2024). The prevalence of sexual



- harassment and bullying among Norwegian Afghanistan veterans: Does workplace harassment disproportionately impact the mental health and life satisfaction of female soldiers? *Journal of Interpersonal Violence*, 40(1-2), 465-488. <https://doi.org/10.1177/08862605241248432>
- Sadler, N., Pedlar, D., & Ursano, R. (2024). Suicide in military and veteran populations: A view across the Five Eyes nations. *Psychiatry*, 87(2), 161-164. <https://doi.org/10.1080/00332747.2024.2306794>
- Sheth, N. K., Wilson, A. B., West, J. C., Schilling, D. C., Rhee, S. H., & Napier, T. C. (2024). Effects of stigmatizing language on trainees' clinical decision-making in substance use disorders: A randomized controlled trial. *Academic Psychiatry*. <https://doi.org/10.1007/s40596-024-02103-5>
- Stein, M. B., Jain, S., Papini, S., Campbell-Sills, L., Choi, K. W., Martis, B., Sun, X., He, F., Ware, E. B., Naifeh, J. A., Aliaga, P. A., Ge, T., Smoller, J. W., Gelernter, J., Kessler, R. C., & Ursano, R. J. (2024). Polygenic risk for suicide attempt is associated with lifetime suicide attempt in US soldiers independent of parental risk. *Journal of Affective Disorders*, 351, 671-682. <https://doi.org/10.1016/j.jad.2024.01.254>
- Thomas, C., Collen, J., Capaldi, V., Zhao, Z., Williams, S., Assefa, S., Chen, S., Albrecht, J., & Wickwire, E. (2024). 0491 Exploring COMISA, sleep-related symptoms, and healthcare utilization in military personnel. *Sleep*, 47(Supplement\_1), A211-A211. <https://doi.org/10.1093/sleep/zsae067.0491>
- Thomas, C. L., Capaldi, V. F., & Collen, J. F. (2024). Breathing new life into PTSD-related sleep disorders! *Journal of Clinical Sleep Medicine*, 20(3), 335-336. <https://doi.org/10.5664/jcsm.11008>
- Tsai, J., Szymkowiak, D., Hooshyar, D., Gildea, S. M., Hwang, I., Kennedy, C. J., King, A. J., Koh, K. A., Luedtke, A., Marx, B. P., Montgomery, A. E., O'Brien, R. W., Petukhova, M. V., Sampson, N. A., Stein, M. B., Ursano, R. J., & Kessler, R. C. (2024). Predicting homelessness among transitioning US Army soldiers. *American Journal of Preventive Medicine*, 66(6), 999-1007. <https://doi.org/10.1016/j.amepre.2024.01.018>
- Walsh, A., Friedman, K., Morrissey, B. H., Godin, S., Morganstein, J., Bryan, C. J., Anestis, M. D., Foley, S. K., Johnson, R. L., Baker, J. C., Bryan, A., Betz, M. E., & Wright-Kelly, E. (2024). Project Safe Guard: Evaluating a lethal means safety intervention to reduce firearm suicide in the National Guard. *Military Medicine*, 189, 510-516. <https://doi.org/10.1093/milmed/usae172>
- Walsh, A., Ghahramanlou-Holloway, M., Stanley, I. H., Betz, M. E., Heintz Morrissey, B., Godin, S., Morganstein, J. C., LaCroix, J., Cobb, E., Grammer, J., & Button, C. J. (2024). Firearm leadership: Development, analysis, and application of a novel concept to message secure storage of firearms in the military. *Military Psychology*, 1-7. <https://doi.org/10.1080/08995605.2024.2336641>
- Wang, J. (2024). The age of prediction: Algorithms, AI, and the shifting shadows of risk. *Psychiatry*, 87(4), 377-380. <https://doi.org/10.1080/00332747.2024.2422273>
- Wang, J., Naifeh, J. A., Mash, H. B. H., Thomas, J. L., Hooke, J., Morganstein, J. C., Fullerton, C. S., Cozza, S. J., Stein, M. B., & Ursano, R. J. (2024). Attachment style, social support network, and lifetime suicide ideation and suicide attempts among new soldiers in the US Army. *Psychiatry*, 87(3), 251-263. <https://doi.org/10.1080/00332747.2024.2364525>
- Wani, A. H., Katrinli, S., Zhao, X., Daskalakis, N. P., Zannas, A. S., Aiello, A. E., Baker, D. G., Boks, M. P., Brick, L. A., Chen, C. Y., Dalvie, S., Fortier, C., Geuze, E., Hayes, J. P., Kessler, R. C., King, A. P., Koen, N., Liberzon, I., Lori, A.,... Ursano, R. J.,... & Uddin, M. (2024). Blood-based DNA methylation and exposure risk scores predict PTSD with high accuracy in military and civilian cohorts. *BMC Medical Genomics*, 17(1), 235. <https://doi.org/10.1186/s12920-024-02002-6>
- Werner, J. K., Albrecht, J., Capaldi, V. F., Jain, S., Sun, X., Mukherjee, P., Williams, S. G., Collen, J., Diaz-Arrastia, R., Manley, G. T., Krystal, A. D., & Wickwire, E. (2024). Association of biomarkers of neuronal injury and inflammation with insomnia trajectories after traumatic brain injury: A TRACK-TBI study. *Neurology*, 102(8), e209269. <https://doi.org/10.1212/wnl.0000000000209269>
- Wickwire, E. M., Collen, J., Capaldi, V. F., Assefa, S. Z., Jones, R., Williams, S. G., Thomas, C. L., Williams, D. C., & Albrecht, J. S. (2024). Virtual first: Implementation of a novel sleep telehealth platform in the United States military. *Frontiers in Sleep*, 3, 1304743.
- Wickwire, E. M., Collen, J., Capaldi, V. F., Zhao,

Z., Williams, S. G., Thomas, C. L., Assefa, S. Z., Albrecht, J. S., & Chen, S. (2024). Prior-night sleep predicts next-day symptoms over ten days among military personnel with sleep problems. *NPJ Biological Timing and Sleep*, 1(1), 10. <https://doi.org/10.1038/s44323-024-00008-y>

Wilkerson, M. D., Hupalo, D., Gray, J. C., Zhang, X., Wang, J., Girgenti, M. J., Alba, C., Sukumar, G., Lott, N. M., Naifeh, J. A., Aliaga, P., Kessler, R. C., Turner, C., Pollard, H. B., Dalgard, C. L., Ursano, R. J., & Stein, M. B. (2024). Uncommon protein-coding variants associated with suicide attempt in a diverse sample of US Army soldiers. *Biological Psychiatry*, 96(1), 15-25. <https://doi.org/10.1016/j.biopsych.2023.12.008>

Zuromski, K. L., Wilks, C. R., Al-Suwaidi, M., Wittler, E., Scherban, L., Hite, B., Raymond, L., Dempsey, C. L., Stein, M. B., Ursano, R. J., Benedek, D., & Nock, M. K. (2024). Perspectives of suicide loss survivors: Qualitative analysis of data from a psychological autopsy study of U.S. Army soldiers. *Suicide and Life-Threatening Behavior*, 54(3), 437-449. <https://doi.org/10.1111/sltb.13052>

## BOOKS

Reynolds, C. F. III, Cozza, S. J., Maciejewski, P. K., Prigerson, H. G., Shear, M. K., Simon, N., & Zisook, S. (Eds.). (2024). *Grief and Prolonged Grief Disorder*. American Psychiatric Association Publishing.

## BOOK CHAPTERS

Benedek, D. M., Morganstein, J. C., West, J. C., & Ursano, R. J. (2024). Disaster psychiatry: Disasters, terrorism, and war. In R. Boland, M. L. Verduin, & P. Ruiz (Eds.). *Kaplan & Sadock's Comprehensive Textbook of Psychiatry*, 12<sup>th</sup> Ed. Lippincott Williams & Wilkins.

Cozza, S. J. & Fisher, J. E. (2024). Bereavement. In C. F. Reynolds III, S. J. Cozza, P. K. Maciejewski, H. G. Prigerson, M. K. Shear, N. Simon, & S. Zisook (Eds.), *Grief and Prolonged Grief Disorder*. American Psychiatric Association Publishing.

Cozza, S. J. & Ogle, C. M. (2024). Bereavement, grief, and prolonged grief disorder in children and adolescents. In C. F. Reynolds III, S. J. Cozza, P. K. Maciejewski, H. G. Prigerson, M. K. Shear, N. Simon, & S. Zisook (Eds.), *Grief and Prolonged Grief Disorder*. American Psychiatric Association Publishing.

Dempsey, C. L. Spangler, P. T., West, J. C., & Benedek, D. M. (2024). Firearm suicide risk and prevention among servicemembers. In Thomson, N., *Handbook of Gun Violence*. Academic Press. <https://doi.org/10.1016/C2021-0-02581-5>

Howe, E. G. (2024) Perspective chapter: Presuppositions psychiatrists must make to do most effective psychotherapy. In F. Durbano, F. Irtelli, B. Marchesi (Eds.), *Psychotherapy – New Trends and Developments*. IntechOpen. <https://www.intechopen.com/online-first/1201651>

Morganstein, J. C. (2024). Climate-related disasters: Impact, risk, and interventions. In R. Moore (Ed.), *Climate Change and Mental Health Equity*. Springer.

## BLOG POSTS AND NEWSLETTERS

- Dr. Dempsey authored a blog post for the Anxiety & Depression Association of America: Firearm suicide risk in service members and veterans.
- Dr. West co-authored an op-ed for the American Psychiatric Association Committee on the Psychiatric Dimensions of Disaster published in *DC Journal*: There is help for people enduring distress.
- The following article by Dr. Dempsey, et al., published in the *Journal of Mood and Anxiety Disorders*, was showcased in a Military REACH newsletter: Suicide without warning: Results from the Army Study to Assess Risk and Resilience in Servicemembers.

# Presentations, Interviews and Briefings, Awards and Appointments

## PRESENTATIONS

(Names in bold text are CSTS personnel)

Andersen, C., **Rice, A., Fisher, J. E., Zhou, J., Ogle, C. M., & Cozza, S. J.** (2024, September). *The association of belief in a just world and prolonged grief disorder in 9/11 bereaved parents* [Poster presentation]. International Society for Traumatic Stress Studies 40<sup>th</sup> Annual Meeting, Boston, MA, United States.

**Benedek, D. M.** (2024, January). *Interviewing survivors of — or witnesses to — torture and trauma: Considerations for military service members* [Virtual presentation and panel discussion]. Reparative Justice II: Challenges of Listening When Interviewing Traumatized Witnesses.

**Benedek, D. M.** (2024, February). *CSTS and CDP overview and research questions* [Invited presentation]. US Medical Research and Development Command Ukraine Research Needs and Capabilities Symposium, Warsaw, Poland.

**Benedek, D. M.** (2024, May). *Using Army administrative data to identify US soldiers at risk of perpetrating violence* [Virtual presentation]. Leiden Trauma Talks, Leiden University Medical Center, Leiden, Netherlands.

**Benedek, D. M.** (2024, September). *Managing the military traumatic stress response: Guiding principles for peers, leaders, and clinicians*. Mental Health International Symposium for the Armed Forces, Mozambique.

**Benedek, D. M.** (2024, October). *The Army STARRS SHOS-B psychological autopsy study: Key findings and the way ahead* [Grand Rounds presentation]. Walter Reed National Military Medical Center Department of Psychiatry Grand Rounds, Bethesda, MD, United States.

**Benedek, D. M., & Dempsey, C. L.** (2024, May). *Relationships between adult bullying behaviors and suicide risk: Results from a psychological autopsy study of U.S. Army servicemembers*. Defense Suicide Prevention

Office All-Hands Meeting, Bethesda, MD, United States.

**Bessman, S.,** Harrison, E., Easterling, A., Preilipper, S., & **Glickman, G.** (2024, June). *Shining light on photic measurement for sleep and circadian field studies*. 38th Annual Meeting of the Associated Professional Sleep Societies, Houston, TX, United States.

**Bessman, S.,** Harrison, E., Easterling, A., Preilipper, S., Snider, M., & **Glickman, G.** (2024, June). *Hybrid effectiveness-implementation study of two novel spectrally-engineered lighting countermeasures for shiftworkers*. 8<sup>th</sup> Annual Johns Hopkins Sleep & Circadian Research Day, Baltimore, MD, United States.

Boese, M., **Berman, R.,** Rujan, O., Spencer, H., Metz, E., Radford, K., & **Choi, K. H.** (2024, August). *Role of subanesthetic intravenous ketamine infusion on stress hormones and synaptic plasticity in a rodent model of closed head injury* [Poster presentation]. Military Health System Research Symposium, Kissimmee, FL, United States.

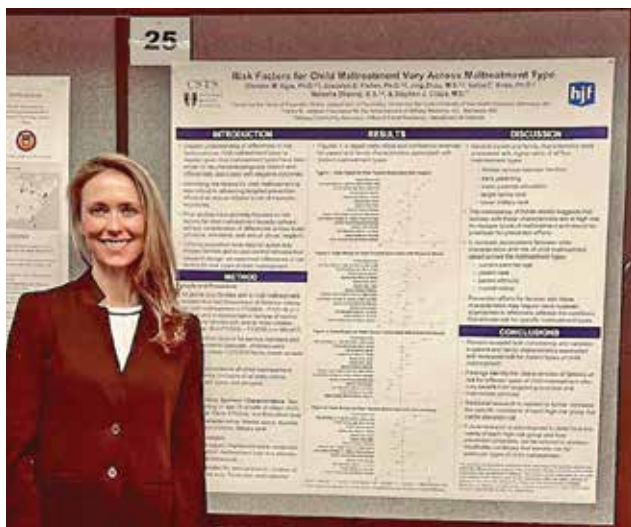
**Bookwala, N. M., Warrior, S., Biggs, Q. M., Moore, J., Fullerton, C. S., Wang, L., & Ursano, R. J.** (2024, April). *Posttraumatic stress disorder in Mortuary Affairs soldiers, 2006-2018* [Poster presentation]. 17th Annual Amygdala, Stress, & PTSD Conference, Bethesda, MD, United States.

Chen, C. J., Geraci, J. C., Eastman, M. R., Paine, C. M., **Naifeh, J. A.,** & Eickhoff, C. J. (2024, July). *Leveraging multi-sector collaboration and technology for military and veteran suicide prevention* [Panel discussion]. 2024 VA/DoD Suicide Prevention Conference, Portland, OR, United States.

**Childs, E. M. & Collette, C.** (2024, September). *The Comprehensive Integrated Primary Prevention (CIPP) plan quality assurance check (QAC): MAR24 and JUL24 submission cycles* [PowerPoint presentation]. National Guard Integrated Primary Prevention Quarterly Strategic Forum, Arlington, VA, United States.

Chokroverty, L., **Cozza, S. J.,** Berkowitz, S. J.,





Dr. Christin Ogle poster presentation at the ISTSS conference.

Hilliard, H. M., Garrett, S. T., Sobowale, K. & McGee, M. E. (2024, October). *Taking the reins before the rains: Preparing child and adolescent psychiatrists (CAPs) before the next disaster* [Poster presentation]. American Academy of Child & Adolescent Psychiatry 71<sup>st</sup> Annual Meeting, Seattle, WA, United States.

**Cleaves, E. S.** (2024, May). *How to work smarter (not harder) using generative AI* [Round table discussion]. Society of Uniformed Services Psychiatrists Annual Meeting, Bethesda, MD, United States.

**Cleaves, E. S., Kotlyar, B., Ping Tsao, C., Russo, R., Gluzman, E., West, J., Schilling, D., Schatte, D., & Song, X. A.** (2024, June). *Scoping review of assessments in medical education: Implications for medical schools and residency programs* [Poster presentation]. Association of Directors of Medical Student Education in Psychiatry Annual Meeting, Pittsburgh, PA, United States.

**Cleaves, E. S., Teisberg, M., Moorhead, B., West, J. C., Cozza, K. L., & Hamaoka, D.** (2024, September). *Posttraumatic stress disorder: Self-Paced Learning Module*. Association of Directors of Medical Student Education in Psychiatry Annual Meeting, Pittsburgh, PA, United States.

**Collette, C.** (2024, November). *The Comprehensive Integrated Primary Prevention (CIPP) plan quality assurance check (QAC)* [PowerPoint

presentation]. National Guard Integrated Primary Prevention Quarterly Strategic Forum, Arlington, VA, United States.

**Cozza, S. J.** (2024, May). *Children and war: Exposures and outcomes* [PowerPoint presentation]. National Child Traumatic Stress Network 2024 All-Network Conference, Bethesda, MD, United States.

**Cozza, S. J.** (2024, May). *Children and firearms: Understanding risk and promoting safety* [PowerPoint presentation]. Duke University Department of Psychiatry & Behavioral Sciences Grand Rounds, Durham, NC, United States.

**Cozza, S. J.** (2024, May). *Children and firearms: Understanding risk and promoting safety* [PowerPoint presentation]. Child & Adolescent Psychiatry Society of Greater Washington, Washington, DC, United States.

**Cozza, S. J.** (2024, June). *Grief and substance use-related deaths* [Virtual presentation]. National Capital Region Pain Initiative Addiction Webinar, Washington, DC, United States.

**Cozza, S. J.** (2024, September). *Grief and substance use-related deaths* [Virtual presentation]. National Capital Region Pain Initiative Annual Substance Use Disorder Symposium. Washington, DC, United States.

**Cozza, S. J.** (2024, September). *Targeting family risk associated with unsafe storage practices*. Firearm Suicide Prevention in the US Military 3rd Annual Summit, Aurora, CO, United States.

**Cozza, S. J.** (2024, October). *Targeting family risk associated with unsecured firearm storage* [Virtual presentation]. Office of Military Community and Family Policy Brief.

**Cozza, S. J.** (2024, December). *Military children and families: Strengths and challenges* [Grand Rounds presentation]. Georgetown University Child & Adolescent Psychiatry Program Grand Rounds, Washington, DC, United States.

**Cozza, S. J., Trotter, J., Berkowitz, S. J., Feder, J. D., & Song, S. J.** (2024, October). *Children and war: Exposures, outcomes, and interventions* [Clinical perspectives workshop]. American Academy of Child & Adolescent Psychiatry 2024 Annual Meeting, Seattle, WA, United States.

**Cozza, S. J., Ogle, C. M., Fisher, J. E., Zhou, J., Walsh, T. R., Zuleta, R. F., Dempsey, C. L., West, J. C., Fullerton, C. S. & Ursano, R. J.**

(2024, April). *The associations of posttraumatic stress disorder and family composition with firearm ownership and unsafe firearm storage practices among military and veteran servicemembers* [Poster presentation]. 17<sup>th</sup> Annual Amygdala, Stress, & PTSD Conference, Bethesda, MD, United States.

Cross, A. B., Fisher, J. E., Ogle, C. M., Zhou, J., & Cozza, S. J. (2024, May). *Predictors of pain and co-morbid psychiatric conditions in family members of 9/11 victims*. American Psychiatric Association Annual Meeting, New York, NY, United States.

Dempsey, C. L., Benedek, D. M., Ao, J., Georg, M. W., Aliaga, P. A., Haller, K., Elmahdy, S. W., Sumberg, L. L., Zuromski, K. L., Nock, M. K., Heeringa, S. G., Kessler, R. C., Stein, M. B., & Ursano, R. J. (2024, December). *Relationships between adult bullying behaviors, firearm storage practices, and suicide risk: Results from a psychological autopsy study of U.S. Army Servicemembers* [Poster presentation]. 2024 National Research Conference for the Prevention of Firearm-Related Harms, Seattle, WA, United States.

Dempsey C. L., Benedek, D. M., Brent, D. A., & Ursano, R. J. (2024, July). *Suicide without warning: Results from the Army Study to Assess Risk and Resilience in Servicemembers* [Poster presentation]. 2024 VA/DOD Suicide Prevention Conference, Portland, OR, United States.

Dempsey, C. L., Bossarte, R. M., Benedek, D.

M, Spangler, P. S., West, J. C., Nock, M. K., Zuromski, K., Georg, M. W., Ao, J. & Ursano, R. J. (2024, August). *Reasons for gun ownership, firearm storage practices and suicide risk in servicemembers: A target for intervention* [Poster presentation]. Military Health System Research Symposium, Kissimmee, FL, United States.

Dempsey, C. L., Bossarte, R. M., Walsh, A. K., Mattson S. A., & West, J. C. (2024, August). *Firearm suicide risk and prevention in servicemembers: Opportunities for science to make an impact* [Symposium]. American Psychological Association Annual Convention, Seattle, WA, United States.

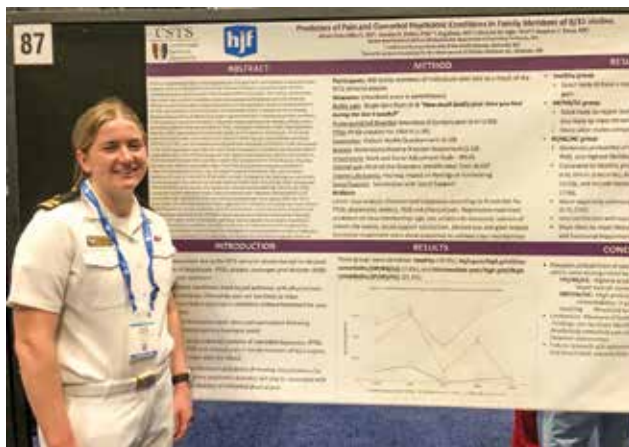
Elmahdy, S. W., Sumberg, L. L., Haller, K., Dempsey, C. L., Benedek, D. M., Ao, J., Georg, M. W., Aliaga, P. A., Zuromski, K. L., Nock, M. K., Heeringa, S. G., Kessler, R. C., Stein, M. B., & Ursano, R. J. (2024, April). *Relationships between adult bullying behaviors and suicide risk: Results from a psychological autopsy study of U.S. Army Servicemembers* [Poster presentation]. 17<sup>th</sup> Annual Amygdala, Stress, & PTSD Conference, Bethesda, MD, United States.

Elmahdy, S. W., Sumberg, L. L., Haller, K., Dempsey, C. L., Benedek, D. M., Ao, J., Georg, M. W., Aliaga, P. A., Zuromski, K. L., Nock, M. K., Heeringa, S. G., Kessler, R. C., Stein, M. B., & Ursano, R. J. (2024, May). *Relationships between adult bullying behaviors and suicide risk: Results from a psychological autopsy study of U.S. Army Servicemembers* [Poster presentation]. Uniformed Services University Research Days, Bethesda, MD, United States

Fisher, J. E., Ogle, C. M., Zhou, J., Walsh, T. R., Fetchet, M., Zuleta, R. F., Fullerton, C. S., Ursano, R. J. & Cozza, S. J. (2024, April). *Avoidant coping and supportive coping differentiate patterns of comorbidity in groups in 9/11-bereaved fifteen years after 9/11* [Poster presentation]. 17<sup>th</sup> Annual Amygdala, Stress, & PTSD Conference, Bethesda, MD, United States.

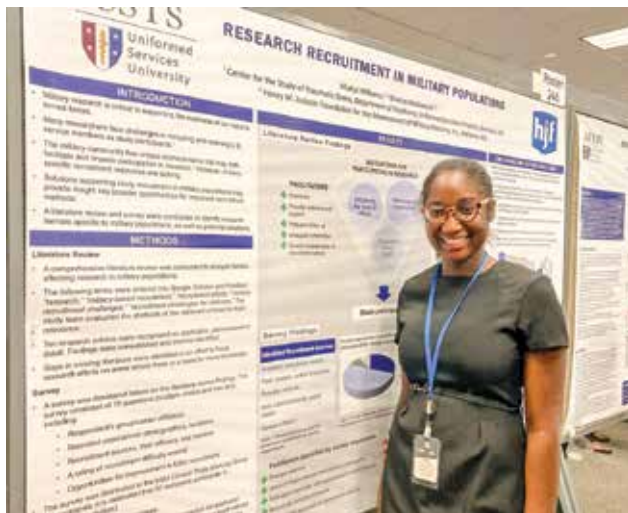
Fisher, J. E., Zhou, J., Rice, A., Ogle, C. M., & Cozza, S. J. (2024, September). *Coping following bereavement predicts longitudinal changes in mental health outcomes* [Poster presentation]. International Society for Traumatic Stress Studies 40<sup>th</sup> Annual Meeting, Boston, MA, United States.

Flynn, B., & Bornemann, J. (2024, May). *Behavioral health in disaster response* [Webinar presentation].



Dr. Lexi Cross poster presentation at the American Psychiatric Association conference.





*Miahje Williams poster presentation at USU Research Days*

Region I Disaster Health Response System and the Region I Emerging Special Pathogens Treatment Center.

**Gabbay, F. H., Naifeh, J. A., Pabst, A. E., Collen, J. F., Killgore, W.D., Werner, J. K., Jr., Williams, S. G., & Capaldi V. F., II.** (2024, March). *Risk and resilience for deployment-related insomnia: using existing military data to address knowledge gaps*. In J. K. Werner, Jr., & C. Good, (Co-chairs), Sleep disorders in military service members and veterans [Paper presentation]. Society for Brain Mapping and Therapeutics 21st Annual World Congress, Los Angeles, CA, United States.

**Glickman, G.** (2024, July). *Interventions for optimizing circadian health: From development to implementation* [Invited virtual presentation]. Translational Sensory & Circadian Neuroscience Unit Current Topics in Sleep & Circadian Health. [https://youtu.be/YfQLb3bRFSI?si=O\\_yKgXsnXs3LpcBp](https://youtu.be/YfQLb3bRFSI?si=O_yKgXsnXs3LpcBp)

**Glickman, G.** (2024, September). *Using light to reduce fatigue and optimize performance in operational environments* [Invited virtual presentation]. Inter-agency Federal Fatigue Management and Research Work Group Meeting.

**Godin, S., Rice, A., McCarroll, J., Walsh, T., & Cozza, S. J.** (2024, April). *Food insecurity in the U.S.: Implications for military families*. [Poster presentation]. 17<sup>th</sup> Annual Amygdala, Stress, & PTSD Conference, Bethesda, MD, United States.

**Greene, E. A., Cleaves, E. S., Gentry, M. & Villanueva, R.** (2024, June). *Be a bias buster!* [Workshop presentation]. Association of Directors of Medical Student Education in Psychiatry Annual Meeting, Pittsburgh, PA, United States.

**Hamaoka, D., Cleaves, E., Kels, L. & Steinmann, M.** (2024, June). *Free (or nearly free) tools for your courses you should know and use*. Association of Directors of Medical Student Education in Psychiatry Annual Meeting, Pittsburgh, PA, United States.

**Howe, E. G.** (2024, February). *Military medical ethics* [Virtual presentation]. Columbia University Graduate Ethics Course, New York, NY, United States.

**Howe, E. G.** (2024, March). *Research ethics*. Uniformed Services University School of Medicine Open House, Bethesda, MD, United States.

**Howe, E. G.** (2024, November). *Boundaries or bonding?* University of Chicago The MacLean Center for Clinical Medical Ethics, Chicago, IL, United States.

**Hu, X. Z., Zhang, L., Li, X., Benedek, D. M., & Ursano R. J.** (2024). *The novel involvement of PTSD-associated FKBP5 in protein networks and signaling pathways* [Poster presentation]. 17<sup>th</sup> Annual Amygdala, Stress, & PTSD Conference, Bethesda, MD, United States.

**Hu, X. Z., Zhang, L., Li, X., Petrovics, G., Ahmed, A. E., Benedek, D. M., & Ursano R. J.** (2024, December). *Association between pre-existing depression and prostate cancer survival: Findings from a prospective study in the PLCO cancer screening trial* [Poster presentation]. Uniformed Services University Neuroscience 2024 Annual Winter Symposium, Bethesda, MD, United States.

**Kumer, K.** (2024, September). *Psych First Aid in the military operational environment: Benefits and limitations*. Mental Health International Symposium for the Armed Forces, Mozambique.

**La Croix, C.** (2024, May). *Post-Covid psychiatric conditions*. Braceland Psychiatric Meeting, US Navy.

**La Croix, C.** (2024, August). *Postvention is prevention*. Star Behavioral Health Providers Event, Washington, DC, United States.

**La Croix, C.** (2024, September). *The cost of caring:*



- Vicarious trauma and resilience.* William S. Fulton, Jr., Appellate Military Judges Conference. Washington, DC, United States.
- La Croix, C.** (2024, October). *Psychiatrically treating the war wounded.* Ukraine Rehabilitation Seminar: Rehabilitation Insights: Translating Success and Addressing the Unique Challenges in the Ukrainian Health System, Warsaw, Poland.
- Lee, R., Watson, N., Danko, J., Holliserry, M., Porter, C., Isidean, S., Walther, S., Park, K., Cooper, E., & **Glickman, G.** (2024, February). *Melatonin and vaccine response immunity and chronobiology study (MAVRICS): The impact of melatonin and sleep on influenza vaccine immunogenicity.* American Academy of Allergy, Asthma & Immunology Annual Meeting, Washington, DC, United States.
- Medvescek, K., West, J. C., Dalgard, C., Dempsey, C. L., Glickman, G., Zhang, L., & Spangler, P. T.** (2024, August). *Follow-up randomized pilot trial investigating two novel treatments for trauma-related nightmares* [Poster presentation]. American Psychological Association Annual Convention, Seattle, WA, United States.
- Medvescek, K. West, J.C., Dalgard, C., Dempsey, C. Glickman, G., Zhang, L., & Spangler, P.T.** (2024, September). *Quantifying exposure: Novel methods to investigate exposure treatments for trauma-related nightmares* [Poster presentation]. International Society for CNS Clinical Trials and Methodology 2024 Autumn Conference, San Diego, CA, United States.
- Medvescek, K., West, J., & Spangler, P.** (2024, December). *Potential for psychometric assessment of obstructive sleep apnea risk in clinical research screening.* Uniformed Services University Neuroscience 2024 Annual Winter Symposium, Bethesda, MD, United States.
- Morganstein, J. C.** (2024, July). *Disasters and mental health: Principles and practices to foster resilience and sustainment for responders and community members* [Virtual presentation]. Behavioral Health Ad Hoc Working Group, National Urban Search & Rescue System, Federal Emergency Management Agency.
- Morganstein, J. C.** (2024, July). *Disasters & behavioral health: Evidence-based and action-oriented resources to protect communities* [Virtual presentation]. Disaster Behavioral Health Quarterly Partner Meeting, Administration for Strategic Preparedness and Response.
- Morganstein, J. C.** (2024, September). *Disaster & preventive psychiatry: Fostering resilience & sustainment for community members & responders* [Virtual presentation]. The Global Conference: Connections and Disconnections: From Everyday Life to Disasters, sponsored by Centro de Estudos Luis Guedes, Brazil.
- Morganstein, J. C.** (2024, September). *Mental health in war & other disasters: The critical role of leaders in protecting military and civilian communities* [Virtual presentation]. The Advance Research Workgroup, North Atlantic Treaty Organization.
- Morganstein, J. C.** (2024, October). *Disasters and mental health: Principles and practices to foster resilience and sustainment* [Virtual Grand Rounds presentation]. University of Colorado School of Medicine Department of Psychiatry Grand Rounds.
- Morganstein, J. C., West, J. C., Gise, L., Ng, A., & Rorbaugh R.** (2024, May). *Disasters and mental health: Building your skills to care for patients through wildfires, chemical spills, pandemics, climate change, and beyond* [Course presentation]. American Psychiatric Association Annual Meeting, New York, NY, United States.
- Mullinax, M., **Greene, E., Ogle, C. M., Fisher, J. E., & Cozza, S. J.** (2024, May). *Barriers to mental healthcare for military physicians in training: Challenges associated with shared identities* [Poster presentation]. Uniformed Services University Research Days, Bethesda, MD, United States.
- Naifeh, J. A.** (2024, August). *An overview of Army STARRS and STARRS-LS.* Presentation to leadership of the Defense Suicide Prevention Office. Arlington, VA, United States.
- Naik Olson, R., Godin, S., Walsh, T. R., Walsh, A. K., Heintz Morrissey, B. A., & Morganstein, J. C.** (2024). *A quality assurance process model of the Comprehensive Integrated Primary Prevention plan to reduce harmful behaviors in the US National Guard.* [Poster presentation]. Uniformed Services University Research Days, Bethesda, MD, United States.
- Nemcek, S. P., **Ogle, C. M., & Cozza, S. J.** (2024, March). *Child maltreatment: How neglect types*

- and other covariates predict removal actions in the US Army. 40<sup>th</sup> Annual Midwest American Academy of Psychiatry and the Law Annual Conference, Milwaukee, WI, United States.
- Nemcek, S., **Ogle, C. M., Zhou, J., & Cozza, S. J.** (2024, May). *The association of failure to provide physical needs with child removal in U.S. Army families with substantiated incidents of child neglect*. Walter Reed National Military Medical Center 2024 Research & Innovation Month Research Symposium, Bethesda, MD, United States.
- Nemcek, S., **Ogle, C. M., Zhou, J., & Cozza, S. J.** (2024, May). *The association of failure to provide physical needs with child removal in U.S. Army families with substantiated incidents of child neglect* [PowerPoint presentation]. Walter Reed National Military Medical Center Research & Innovation Month Clinical Award Competition.
- Odeh, A., Blumhorst, A., Searfass, D., Weingrad A. B., Mash, H. B. H., Fullerton, C. S., Morganstein, J. C., & Ursano, R. J.** (2024, May). *COVID-19-related life changes and mental health outcomes in National Guard service members* [Poster presentation]. Uniformed Services University Research Days, Bethesda, MD, United States.
- Ogembo, M., **Hamaoka, D., Cleaves, E. S., Meyer, E. G., Pham, A., & Cozza, K. L.** (2024). *Personality disorder: Self-paced learning module*. [Learning module]. Association of Directors of Medical Student Education in Psychiatry Annual Meeting, Pittsburgh, PA, United States. <https://www.admsep.org/subpages/csi/modules/personalitydo2024/index.html#/>
- Ogle, C. M.** (2024, September). *Safe Is Strong: Enhancing safety in young military families* [Invited, virtual presentation]. Cohen Veterans Network, Stamford, CT, United States.
- Ogle, C. M., Cozza, S. J., Ellis, H., Gewirtz, A., & Lieberman, A.** (2024, May). *Navigating child trauma and traumatic grief through cultural lenses in war-affected regions* [Workshop presentation]. National Child Traumatic Stress Network 2024 All-Network Conference, Bethesda, MD, United States.
- Ogle, C. M., Fisher, J. E., Zhou, J., Rose, V. C., Dhanraj, N., & Cozza, S. J.** (2024, September). *Risk factors for child maltreatment vary across maltreatment type* [Poster presentation]. International Society for Traumatic Stress Studies 40<sup>th</sup> Annual Meeting, Boston, MA, United States.
- Ogle, C. M., Fisher, J. E., Zhou, J., Walsh, T., Nemcek, S., Zuleta, R. F., Fullerton, C. S., Ursano, R. J., & Cozza, S. J.** (2024, April). *Child protective actions in response to specific types of child neglect* [Poster presentation]. 17<sup>th</sup> Annual Amygdala, Stress, & PTSD Conference, Bethesda, MD, United States.
- Ogle, C. M.,** Nemcek, S. P., Hisle-Gorman, E., Best, S. M., & **Cozza, S. J.** (2024, February). *Child maltreatment in military families: Risk factors and prevention efforts* [Multiple-paper presentation]. 39<sup>th</sup> Annual San Diego International Conference on Child and Family Maltreatment, San Diego, CA, United States.
- O'Keefe, C. L., Scott, A. A., **Cozza, K. L., Cleaves, E. S., & Hamaoka, D. A.** (2024, June). *What do medical students think about faculty surveys?* [Poster presentation]. Association of Directors of Medical Student Education in Psychiatry Annual Meeting, Pittsburgh, PA, United States.
- Pabst, A.** (2024, November). *Navigating career paths in neuroscience: Transitioning from undergraduate studies to industry & academic research* [Invited presentation]. Augustana University, Sioux Falls, SD, United States.
- Preilipper, S., **Bessman, S.,** Easterling, A., Harrison, E., & **Glickman, G.** (2024, April). *Lighting and mental health: Insights from recent sleep and circadian studies*. 17<sup>th</sup> Annual Amygdala, Stress, & PTSD Conference, Bethesda, MD, United States
- Preilipper, S., Harrison, E., **Bessman, S.,** Easterling, A., & **Glickman, G.** (2024, May). *Mental health and its relationship with sleep, chronotype, and light in US service members*. Uniformed Services University Research Days, Bethesda, MD, United States.
- Preilipper, S., **Bessman, S.,** Easterling, A., Harrison, E., & **Glickman, G.** (2024, June). *Mental health, sleep, chronotype and light: Exploring these relationships in recent studies of circadian health*. 8<sup>th</sup> Annual Johns Hopkins Sleep & Circadian Research Day, Baltimore, MD, United States.
- Rakofsky, J. & **West, J. C.** (2024, June). *Educational research: Statistics simplified* [Workshop

- presentation]. Association of Directors of Medical Student Education in Psychiatry Annual Meeting, Pittsburgh, PA, United States.
- Searfass, D., Weingrad, A. B., Blumhorst, A., Odeh, A., Mash, H. B. H., Fullerton, C. S., Morganstein, J. C., & Ursano, R. J.** (2024, May). *Recovery time: Effects of COVID-19-related life changes in activated National Guard service members* [Poster presentation]. Uniformed Services University Research Days, Bethesda, MD, United States.
- Santiago, A., Harrison, E., Easterling, A., Bessman, S., Preilipper, S., & Glickman, G.** (2024). *Auditory and visual psychomotor vigilance tasks are not interchangeable: Investigating the gold standard for the objective assessment of alertness*. Oak Ridge Institute for Science & Education Summer Student Symposium, Bethesda, MD, United States.
- Scott, A., Hamaoka, D., Cleaves, E., Hawks, M., O'Keefe, C., & Cozza, K. L.** (2024, June). *Faculty performance evaluations: Three years of lessons learned*. [Poster presentation]. Association of Directors of Medical Student Education in Psychiatry Annual Meeting, Pittsburgh, PA, United States.
- Shor, R.** (2024, May). *Trauma and stress-related reactions: Coping strategies following a traumatic event* [Invited presentation]. Hadassah Wrestling with PTSD: How Healthcare Providers Can Help Win the Battle.
- Spangler, P. T., Dalgard, C., Dempsey, C. L., Glickman, G., Medvescek, K., West, J. C., & Zhang, L.** (2024, August). *Randomized pilot trial of emerging exposure and non-exposure treatments for trauma-related nightmares* [Poster presentation]. Military Health System Research Symposium, Kissimmee, FL, United States.
- Sumberg, L., Berman, R., Qiu, J., Greene, S., Tran, B., Torres, J., Boese, M., & Choi, K.** (2024, December). *Effects of mild closed head injury on microglia morphology in the cerebral cortex of rats* [Poster presentation]. Uniformed Services University Neuroscience 2024 Annual Winter Symposium, Bethesda, MD, United States.
- Tyagi, R., Cozza, K. L., Mullinex, P., Greene, E. A., Hamaoka, D. A., Cleaves, E., West, J. C., Kumer, K., Serpico, E., Morganstein, J. M., Lachman, L., & Ottolini, M.** (2024, June). *Obtaining and documenting informed consent: An advanced UME cross-specialty, role-playing skill builder* [Poster presentation]. Association of Directors of Medical Student Education in Psychiatry Annual Meeting, Pittsburgh, PA, United States.
- Ursano, R. J.** (2024, January). *Perspectives on prevention and behavioral health across the life cycle: Challenges and opportunities* [Oral presentation]. National Academy of Sciences: Committee on a Blueprint for a National Prevention Infrastructure for Behavioral Health Disorders, Washington DC, United States
- Ursano, R. J.** (2024, June). *Overview of the Center for the Study of Traumatic Stress, Uniformed Services of the Health Sciences, and Department of Defense* [Invited virtual presentation and panel discussion]. All-Ukrainian Scientific and Practical Conference with International Participation: Restoring the Mental Health of Military Personnel, Lviv, Ukraine.
- Ursano, R. J.** (2024, June). *Overview of the Center for the Study of Traumatic Stress, Uniformed Services of the Health Sciences, and Department of Defense* [Invited virtual presentation]. All-Ukrainian Scientific and Practical Conference with International Participation: Restoring the Mental Health of Military Personnel, Lviv, Ukraine.
- Ursano, R. J.** (2024, September). *Personalized preventive medicine for mental health: Protecting the brain combat space* [Virtual presentation]. North Atlantic Treaty Organization Advanced Research Workshop: Digital Tools for Prevention, Mitigation, and Treatment of Traumatic Stress Responses in Terror and War, Tbilisi, Georgia.
- Vigilar, M. V., Ogle, C. M., Rose, V. C., Zhou, J., Fisher, J. E., & Cozza, S. J.** (2024, October). *Heightened risk of child maltreatment in female active duty service member families* [Poster presentation]. American Academy of Child & Adolescent Psychiatry 2024 Annual Meeting, Seattle, WA, United States.
- Walsh, A. K.** (2024, August). *Project Safe Guard: Evaluating a lethal means safety intervention to reduce firearm suicide in the National Guard* [PowerPoint Presentation]. American Psychological Association Annual Convention, Seattle, WA, United States.
- Walsh, A. K., Bryan, C. J., Anestis, M. D., Betz, M. E., Morganstein, J. C., Heintz Morrissey, B. A.,**



- Godin, S. J., & Vernon, E.** (2024, August). *The evolution of Project Safe Guard in the National Guard: Towards an integrated sustained approach to firearm injury prevention* [Poster presentation]. Military Health System Research Symposium, Kissimmee, FL, United States.
- Walsh, A. K., Heintz Morrissey, B. A., Collette, C., & Ayers, D.** (2024, August). *Introduction to Project Safe Guard: Generational expansion* [PowerPoint presentation] National Guard Bureau Resilience, Risk Reduction, & Suicide Prevention 2024 Symposium, Baton Rouge, LA, United States.
- Walsh, T. R., Walsh, A. K., Heintz Morrissey, B. A., Naik Olson, R. K., & Morganstein, J. C.** (2024, August). *A quality assurance process model of the comprehensive integrated primary prevention plan to reduce harmful behaviors in the US National Guard* [Poster presentation]. Military Health System Research Symposium, Kissimmee, FL, United States.
- Wang, J., Biggs, Q. M., Naifeh, J. A., Mash, H. B. H., Thomas, J., Fullerton, C. S., & Ursano, R. J.** (2024, August). *Reactivity to Mortuary Affairs work: A latent class analysis* [Poster presentation]. Military Health System Research Symposium, Kissimmee, FL, United States.
- Wang, J., Naifeh, J. A., Mash, H. B. H., Thomas, J., Morganstein, J. C., Fullerton, C. S., Cozza, S. J., Stein, M. B., & Ursano, R. J.** (2024, April). *Joint influence of attachment styles and social support network on lifetime suicidal behaviors* [Poster presentation]. 17<sup>th</sup> Annual Amygdala, Stress, & PTSD Conference, Bethesda, MD, United States.
- Warrior, S., Bookwala, N. M., Biggs, Q. M., Moore, J., Fullerton, C. S., Wang, L., & Ursano, R. J.** (2024, May). *Rates of depression in US Army Mortuary Affairs soldiers, 2006 to 2018* [Poster presentation] Uniformed Services University Research Days, Bethesda, MD, United States.
- West, J. C.** (2024, January) *Sustaining the disaster workforce during conflict: What can we learn from combat and operational stress control?* [Virtual presentation]. European College of Neuropsychopharmacology Traumatic Stress Network Hot Topic Virtual Meeting.
- West, J. C.** (2024, March). *Frontline support: The value of embedded mental health programs in the military.* Brain Health Summit, Warsaw, Poland.
- West, J. C.** (2024, July). *Let's Talk About Your Guns: Preventing suicide through personal firearm safety* [Presentation]. US Coast Guard Wellness Wednesday, Bethesda, MD, United States.
- West, J. C.** (2024, August). *Let's Talk About Your Guns: Public health messaging about firearm safety* [Presentation]. American Psychological Association Annual Convention, Seattle, WA, United States.
- West, J. C., Gentry, M. T., Villanueva, R., Cotton, N. K., & Greene, E. A.** (2024, June). *Shaping a caring and inclusive learning environment: Inspiring discussion and thought on addressing microaggressions and student mistreatment* [Workshop presentation]. Association of Directors of Medical Student Education in Psychiatry Annual Meeting, Pittsburgh, PA, United States.
- Younghans, C., Ogle, C. M., Fisher, J. E., & Cozza, S. J.** (2024, September). *Reducing injuries and death by promoting shared decision-making about firearm storage practices* [Poster presentation]. International Society for Traumatic Stress Studies 40<sup>th</sup> Annual Meeting, Boston, MA, United States.

## INTERVIEWS AND BRIEFINGS

- Therapeutic Arts Festival** (January 23-25, 2024). Col Kumer served as a panel expert on *Building Health, Wellness, and Community Together* at the British Embassy in Washington, DC.
- Annual Brain Mapping Day at the US Congress** (June 5, 2024). Dr. West participated in this event promoting new diagnostic and therapeutic methods for brain function restoration.
- Pentagon Briefing on STARRS Research** (July 15, 2024). Dr. Ursano, COL Capaldi, Dr. Thomas and Mr. Hurwitz provided updates to DoD and VA senior leaders on STARRS research developments.
- Disaster Behavioral Health Quarterly Partner Meeting** (July 30, 2024). Dr. Morganstein was the inaugural speaker for this US Department of Health and Human Services-led federal behavioral health response meeting, presenting CSTS resources.
- The State of Military Kids and Families in 2024 Convening Event** (Aug 27-29, 2024). Dr. Ogle participated in discussions on behavioral health innovations for military families.

**Army National Guard Behavioral Health Briefing** (Nov 5, 2024). The CSTS team briefed leadership at the NGB on behavioral health program collaborations.

**HSI Meeting** (Nov 20, 2024). Drs. A. Walsh and West met with HSI agents and analysts regarding building resilience in child exploitation investigation teams.

## AWARDS AND APPOINTMENTS

**National Medical Board Service:** Col. Kumer served on the National Board of Medical Examiners (NBME) US Medical Licensing Examination Step 2 Clinical Knowledge (CK) standard-setting panel at NBME Headquarters in Philadelphia, PA on April 10-11, 2025. This panel plays a crucial role in evaluating the Step 2 CK pass/fail standard.

**Book of the Month:** *A Psychiatrist's Guide to Advocacy*, edited by Dr. Vance et al., was selected as *Psychiatry Online's* Book of the Month for October, 2024.

**Award for Design Excellence:** The Bereaved Family Self-Care Toolkit (SPP) received an American Graphic Design Award for 2024.

**Highly Cited Research:** "Association of emotion reactivity and distress intolerance with suicide attempts in U.S. Army soldiers" by Dr. Naifeh et al. was among the most-cited papers in *Suicide and Life-Threatening Behavior*.



*Dr. Curt West presenting at the American Psychiatric Association conference.*

**Research Engagement:** With 429 new reads, Dr. Regier's research was the second-most-read among USU researchers on ResearchGate for the week of May 5, 2024. Dr. Ursano's publications were the second-most-read from USU on ResearchGate during the weeks of November 4, 2024 (462 new reads) and December 16, 2024 (307 new reads).

**Research Recognition:** Dr. Steven Nemcek, Child & Adolescent Psychiatry Fellow with the CSTS CFP, won second place at the 16<sup>th</sup> Annual National Capital Region Research and Inquiry Competition for his project on child neglect and Army family dynamics.

**Scholarly Publication Award:** The 2024 Association of Directors of Medical Student Education in Psychiatry Scholarly Publication Award was given to USU authors Drs. Meyer, K. Cozza, West and Hamaoka for their article, "The effectiveness of online experiential learning in a psychiatry clerkship," published in *Academic Psychiatry*.

**International Recognition:** The UN Division of Healthcare Management and Occupational Safety and Health received permission to translate CSTS-published factsheets and resources into 15 UN languages.

**VA Research Review Panel:** Dr. Dempsey served as a reviewer on the VA Office of Research and Development's Mental and Behavioral Health review panel, covering studies on Veteran mental health, substance use and suicide prevention.

**The following person was appointed as Professor:**

- Derrick Hamaoka, MD

**The following person was appointed as Associate Professor:**

- Justin Curley, COL, MC, USA

**The following personnel were appointed as Research Assistant Professors:**

- Pablo Aliaga, MS
- Sarah Maggio, PhD
- Alexandra Pabst, PhD
- Alexander Rice-Solo, PhD
- Adam Walsh, PhD

# CSTS Personnel

## DIRECTORS

**Robert J. Ursano, MD**  
Col, MC, FS, USAF (Ret.)  
Professor of Psychiatry and  
Neuroscience  
Department of Psychiatry  
Director  
CSTS, USU

**David M. Benedek, MD**  
COL, MC, USA (Ret.)  
Professor  
Department of Psychiatry  
Associate Director, Consultation  
and Education  
CSTS, USU

**Stephen J. Cozza, MD**  
COL, USA (Ret.)  
Professor of Psychiatry and  
Pediatrics  
Department of Psychiatry  
Associate Director, CFP  
CSTS, USU

**Brian W. Flynn, EdD**  
RADM, USPHS (Ret.)  
Adjunct Professor  
Department of Psychiatry  
Special Advisor to the Director  
CSTS, USU

**Carol S. Fullerton, PhD**  
Research Professor  
Department of Psychiatry  
Scientific Director  
CSTS, USU

**Paul E. Hurwitz, MPH**  
Instructor  
Department of Psychiatry  
Director, Program Operations  
(STARRS)  
CSTS, USU

**Holly H. Mash, PhD**  
Research Associate Professor  
Department of Psychiatry  
Assistant Scientific Director  
CSTS, USU

**Joshua C. Morganstein, MD**  
CAPT, USPHS (Ret.)  
Professor/Assistant Chair  
Department of Psychiatry  
Deputy Director  
CSTS, USU

**James A. Naifeh, PhD**  
Research Associate Professor  
Department of Psychiatry  
Assistant Scientific Director  
CSTS, USU

**Jeffrey L. Thomas, PhD**  
COL, USA (Ret.)  
Research Professor  
Department of Psychiatry  
Executive Director, Center/  
Program Operations  
CSTS, USU

## SCIENTISTS

**Pablo A. Aliaga, MS**  
Research Assistant Professor  
Department of Psychiatry  
Biostatistician  
CSTS, USU

**Eric Allely, MD**  
COL, USA (Ret.)  
Senior Researcher, Health Systems  
Management  
Department of Psychiatry  
CSTS, USU

**David M. Benedek, MD**  
COL, MC, USA (Ret.)  
Professor  
Department of Psychiatry

Associate Director, Consultation  
and Education  
CSTS, USU

**Quinn M. Biggs, PhD, MPH**  
Research Assistant Professor  
Department of Psychiatry  
Research Psychologist  
CSTS, USU

**Robert M. Bossarte, PhD**  
Professor  
Department of Psychiatry and  
Behavioral Neurosciences  
University of South Florida  
Adjunct Professor  
Department of Psychiatry  
CSTS, USU

**Maria Braga, DDS, PhD**  
Professor  
Department of Anatomy,  
Physiology and Genetics  
CSTS, USU

**Allen R. Braun, MD**  
Senior Scientist  
Department of Psychiatry  
CSTS, USU

**Oscar A. Cabrera, PhD**  
LTC, MS, USA  
Department of Psychiatry  
CSTS, USU

**Vincent F. Capaldi, II, ScM, MD,**  
DFAPA, FACP, FAASM  
COL, MC, USA  
Chair, Department of Psychiatry  
Professor of Psychiatry, Medicine  
and Neuroscience  
Senior Scientist, CSTS  
Program Director, Combined  
Internal Medicine/Psychiatry  
Residency, USU



**Kwang Choi, PhD**  
Associate Professor  
Department of Psychiatry  
CSTS, USU

**Elle S. Cleaves, MD**  
Lt Col, USAF, MC, FS  
Assistant Professor  
Director, Psychiatry Clerkship  
Department of Psychiatry  
CSTS, USU

**Kelly L. Cozza, MD, DLFAPA, FACP**  
Professor and Vice Chair  
(Education)  
Director, Departmental Faculty  
Appointments, Promotions  
and Development  
Department of Psychiatry  
CSTS, USU

**Stephen J. Cozza, MD**  
COL, USA (Ret.)  
Professor of Psychiatry and  
Pediatrics  
Department of Psychiatry  
Associate Director, CFP  
CSTS, USU

**Justin M. Curley, MD**  
COL, MC, USA  
Deputy Chair  
Associate Professor  
Department of Psychiatry  
CSTS, USU

**Catherine L. Dempsey, PhD, MPH**  
Research Associate Professor  
Department of Psychiatry  
Research Psychologist  
CSTS, USU

**Joscelyn E. Fisher, PhD**  
Research Associate Professor  
Department of Psychiatry  
Research Psychologist  
CSTS, USU

**Brian W. Flynn, EdD**  
RADM, USPHS (Ret.)  
Adjunct Professor  
Department of Psychiatry  
Special Advisor to the Director  
CSTS, USU

**Michael C. Freed, PhD**  
Chief, Services Research and  
Clinical Epidemiology Branch  
National Institute of Mental Health  
Department of Psychiatry  
CSTS, USU

**Carol S. Fullerton, PhD**  
Research Professor  
Department of Psychiatry  
Scientific Director  
CSTS, USU

**Francie H. Gabbay, PhD**  
Research Associate Professor  
Department of Psychiatry  
CSTS, USU

**James Giordano, PhD**  
Adjunct Professor  
Department of Psychiatry  
CSTS, USU

**Gena L. Glickman, PhD**  
Associate Professor  
Director, Chronobiology, Light and  
Sleep Lab  
Department of Psychiatry and  
Neuroscience  
CSTS, USU

**Oscar I. Gonzalez, PhD**  
MAJ, MC, USA  
Research Psychologist  
Army Resilience Directorate  
Headquarters, US Department of  
the Army, DCS, G-1  
Department of Psychiatry  
CSTS, USU

**Elizabeth A. Greene, MD, FAPA**  
Assistant Professor  
Director, Tele/Digital Education  
Department of Psychiatry  
CSTS, USU

**Derrick A. Hamaoka, MD**  
Col, USAF, MC, FS (Ret.)  
Professor  
Department of Psychiatry  
CSTS, USU

**Erin L. Maresh, PhD**  
Research Psychologist  
Department of Psychiatry  
CSTS, USU

**Brooke A. Heintz Morrissey, PhD, LCSW**  
LTC, ARNG  
Operations Director, SPP & NGP  
Department of Psychiatry  
CSTS, USU

**Harry C. Holloway, MD**  
COL, MC, USA (Ret.)  
Professor Emeritus  
Department of Psychiatry  
CSTS, USU

**Marjan G. Holloway, PhD**  
Professor  
Departments of Medical &  
Clinical Psychology and  
Psychiatry  
CSTS, USU

**Edmund G. Howe III, MD, JD**  
Professor  
Department of Psychiatry  
CSTS, USU

**Xianzhang Hu, MD, PhD**  
Department of Psychiatry  
CSTS, USU

**Luke R. Johnson, PhD**

Associate Professor of Psychology  
University of Tasmania  
Adjunct Assistant Professor  
Department of Psychiatry  
CSTS, USU

**Tzu Cheg Kao, PhD**

Professor  
Departments of Preventive  
Medicine & Biometrics and  
Psychiatry  
CSTS, USU

**Elie Karam, MD**

Professor and Chairman  
Department of Psychiatry  
American University, Beirut  
CSTS, USU

**David S. Krantz, PhD**

Emeritus Professor  
Departments of Medical & Clinical  
Psychology and Psychiatry  
CSTS, USU

**Kimberly D. Kumer, MD**

Col, USAF, MC  
Assistant Professor  
Director of Operational  
Curriculum  
Department of Psychiatry  
CSTS, USU

**Christina La Croix, DO**

CDR, USN  
Assistant Professor  
Departments of Physical Medicine  
& Rehabilitation and Psychiatry  
CSTS, USU

**He Li, MD, PhD**

Associate Professor  
Department of Psychiatry  
CSTS, USU

**Xian Liu, PhD**

Research Professor  
Deployment Health Clinical  
Center  
WRNMMC  
Senior Scientist  
CSTS, USU

**Sarah Maggio, PhD**

Research Assistant Professor  
Department of Psychiatry  
Senior Portfolio Manager  
CSTS, USU

**Erin L. Maresh, PhD**

Research Psychologist  
Department of Psychology  
CSTS, USU

**Holly H. Mash, PhD**

Research Associate Professor  
Department of Psychiatry  
Assistant Scientific Director  
CSTS, USU

**James E. McCarroll, PhD, MPH**

COL, USA (Ret.)  
Research Professor  
Department of Psychiatry  
CSTS, USU

**Eric G. Meyer II, MD**

Lt Col, USAF, MC, FS  
Professor  
Department of Psychiatry  
CSTS, USU

**Joshua C. Morganstein, MD**

CAPT, USPHS (Ret.)  
Professor/Assistant Chair  
Department of Psychiatry  
Deputy Director  
CSTS, USU

**James A. Naifeh, PhD**

Research Associate Professor  
Department of Psychiatry  
Assistant Scientific Director  
CSTS, USU

**Thomas H. Nassif, PhD**

MAJ, MS, USA  
Assistant Professor and Deputy  
Vice Chair for Research  
Department of Psychiatry  
CSTS, USU

**Christin M. Ogle, PhD**

Research Assistant Professor  
Department of Psychiatry  
Child Research Psychologist  
CSTS, USU

**Alexandria Pabst, PhD**

Research Assistant Professor  
Department of Psychiatry  
Research Psychologist  
CSTS, USU

**Darrel A. Regier, MD, MPH**

RADM, USPHS (Ret.)  
Adjunct Professor  
Department of Psychiatry  
Senior Scientist  
CSTS, USU

**Dori B. Reissman, MD, MPH**

RDML, USPHS (Ret.)  
Adjunct Professor  
Department of Psychiatry  
CSTS, USU

**Alexander J. Rice, PhD**

Research Assistant Professor  
Department of Psychiatry  
CSTS, USU

**Dale Russell, PhD**

Director of Research/Senior  
Research Psychologist  
Commander, Naval Surface Forces  
Behavioral Science Researcher  
Department of Psychiatry  
CSTS, USU

**Patcho N. Santiago, MD, MPH**  
CAPT, MC, USN (Ret.)  
School of Medicine  
Associate Professor  
Department of Psychiatry  
CSTS, USU

**Eric Serpico, DO**  
CDR, MC, USN  
Assistant Professor  
Department of Psychiatry  
CSTS, USU

**Rachel Shor, PhD**  
Research Assistant Professor  
Department of Psychiatry  
Research Psychologist  
CSTS, USU

**Patricia T. Spangler, PhD**  
Research Assistant Professor  
Department of Psychiatry  
Clinical Research Psychologist  
CSTS, USU

**Madeline Teisberg, DO**  
LCDR, MC, USN  
Assistant Professor  
Department of Psychiatry  
CSTS, USU  
Faculty, National Capital  
Consortium Psychiatry  
Residency  
WRNMMC  
CSTS, USU

**Jeffrey L. Thomas, PhD**  
COL, USA (Ret.)  
Research Professor  
Department of Psychiatry  
Executive Director, Center/  
Program Operations  
CSTS, USU

**E. Fuller Torrey, MD**  
Executive Director  
Stanley Medical Research Institute  
CSTS, USU

**Robert J. Ursano, MD**  
Col, MC, FS, USAF (Ret.)  
Professor of Psychiatry and  
Neuroscience  
Department of Psychiatry  
Director  
CSTS, USU

**Mary C. Vance, MD, MSc**  
LCDR, USPHS  
Director, Behavioral Health, Pacific  
Area, USCG  
Assistant Professor  
Department of Psychiatry  
CSTS, USU

**Adam Walsh, PhD, LCSW**  
Research Assistant Professor  
Department of Psychiatry  
Senior Scientist  
CSTS, USU

**Tasaneë Walsh, PhD, MPH,  
MSW**  
Research Assistant Professor  
Department of Psychiatry  
Senior Scientist  
CSTS, USU

**Jing Wang, PhD**  
Research Associate Professor  
Departments of Psychiatry and  
Medical & Clinical Psychology  
Quantitative Psychologist  
CSTS, USU

**Leming Wang, MS**  
Instructor  
Department of Psychiatry  
Biostatistician  
CSTS, USU

**Maree J. Webster, PhD**  
Research Assistant Professor  
Department of Psychiatry  
CSTS, USU  
Director  
Laboratory of Brain Research  
Stanley Medical Research Institute  
CSTS, USU

**Lars Weisaeth, MD**  
Professor  
Division of Disaster Psychiatry  
University of Oslo  
CSTS, USU

**James C. West, MD**  
CAPT, MC, USN (Ret.)  
Associate Professor and Vice  
Chair for Research  
Department of Psychiatry  
CSTS, USU

**Ronald Whalen, PhD, LMSW**  
Senior Research Social Worker  
Department of Psychiatry  
CSTS, USU

**Kathleen Wright, PhD**  
Former Director (Ret.)  
Force Health Protection Program  
USAMRU-E  
WRAIR  
CSTS, USU

**Gary H. Wynn, MD**  
COL, MC, USA (Ret.)  
Professor  
Department of Psychiatry  
Senior Scientist  
CSTS, USU

**Lei Zhang, MD**  
Associate Professor  
Department of Psychiatry  
Senior Scientist  
CSTS, USU

## **PROGRAM MANAGEMENT**

**Rachel Audant, MA**  
Program Manager  
Department of Psychiatry  
CSTS, USU

**Wafa Azgugu, MS**  
Clinical Coordinator II  
Department of Psychiatry  
CSTS, USU



**Kristin Baker, MSW, LCSW**  
Behavioral Health Consultant  
Department of Psychiatry  
CSTS, USU

**Sara Bessman, MS**  
Program Manager  
Department of Psychiatry  
CSTS, USU

**Alexandra Blumhorst, BS**  
Study Coordinator II  
Department of Psychiatry  
CSTS, USU

**Elisa Childs, PhD, MSW, LCSW**  
Program Manager/Evaluator  
Department of Psychiatry  
CSTS, USU

**Christy Collette, MA**  
Senior Operations Manager, NGP  
Department of Psychiatry  
CSTS, USU

**Natasha Dhanraj, BS**  
Study Coordinator  
Department of Psychiatry  
CSTS, USU

**Jacqueline Dotson, MSW, LCSW, BCD**  
Behavioral Health Consultant  
Department of Psychiatry  
CSTS, USU

**Katie Duffy, LCSW, LCAC, MAC, BCD**  
Behavioral Health Consultant  
Department of Psychiatry  
CSTS, USU

**Leah McGowan Fletcher, MSW, LCSW, BCD**  
LTC, MS, ARNG  
Senior Operations Manager,  
Army Behavioral Health and  
National Guard Programs  
Department of Psychiatry  
CSTS, USU

**Shira Godin, BS**  
Study Coordinator  
Department of Psychiatry  
CSTS, USU

**Amber Hampton, MSN, RN**  
Clinical Coordinator II  
Department of Psychiatry  
CSTS, USU

**Brooke A. Heintz Morrissey, PhD, LCSW**  
LTC, ARNG  
Operations Director  
Suicide Prevention Program, &  
Army Behavioral Health and  
National Guard Programs  
Department of Psychiatry  
CSTS, USU

**Joseph Hooke, BS**  
Study Coordinator  
Department of Psychiatry  
CSTS, USU

**Pewu Lavela, BS**  
Study Coordinator  
Department of Psychiatry  
CSTS, USU

**Laura Liu, BS, RN**  
Clinical Coordinator II  
Department of Psychiatry  
CSTS, USU

**Elizabeth Lute, MBA HM, BSN, RN**  
Clinical Coordinator II  
Department of Psychiatry  
CSTS, USU

**John Lyons, MSc**  
Study Coordinator  
Department of Psychiatry  
CSTS, USU

**Sarah Maggio, PhD**  
Research Assistant Professor  
Department of Psychiatry  
Senior Portfolio Manager  
CSTS, USU

**Andrew (Scott) McRae, MSW**  
Program Manager III  
Department of Psychiatry  
CSTS, USU

**Kristina Medvescek, MPH**  
Study Coordinator  
Department of Psychiatry  
CSTS, USU

**Miranda Meyer, MPA**  
Program Manager  
Department of Psychiatry  
CSTS, USU

**Yumina Myers, MEd**  
Senior Operations Manager  
Department of Psychiatry  
CSTS, USU

**Amila Odeh, BS**  
Study Coordinator  
Department of Psychiatry  
CSTS, USU

**Joseph Piemontese, BS**  
Information Technology Specialist  
Department of Psychiatry  
CSTS, USU

**Deborah M. Probe, MA**  
Project Coordinator  
Department of Psychiatry  
CSTS, USU

**Amiris Roberson, MPH, CHES**  
Senior Program Coordinator  
Department of Psychiatry  
CSTS, USU

**Evan Salerno, MA**  
Study Coordinator  
Department of Psychiatry  
CSTS, USU

**Devin Searfass, MA**  
Study Coordinator  
Department of Psychiatry  
CSTS, USU

**Robin Sontheimer, MSW,  
LCSW-C**  
Behavioral Health Consultant  
Department of Psychiatry  
CSTS, USU

**Jeremiah Trapp, MSW, LCSW**  
Behavioral Health Consultant  
Department of Psychiatry  
CSTS, USU

**Aaron Weingrad, BS**  
Assistant to the Director  
Scientific Program Coordinator II  
Department of Psychiatry  
CSTS, USU

## **BIostatisticians**

**Pablo A. Aliaga, MS**  
Research Assistant Professor  
Department of Psychiatry  
CSTS, USU

**Leming Wang, MS**  
Instructor  
Department of Psychiatry  
CSTS, USU

**Jingning Ao, MPH**  
Biostatistician  
Department of Psychiatry  
CSTS, USU

**Matthew Georg, MPH**  
Data Analyst  
Department of Psychiatry  
CSTS, USU

**Katy Haller, MSPH**  
Biostatistician  
Department of Psychiatry  
CSTS, USU

**Jing Zhou, MS**  
Biostatistician  
Department of Psychiatry  
CSTS, USU

## **FINANCIAL MANAGEMENT**

**Diana Monday**  
Administrative Assistant II &  
Presentations Coordinator  
Department of Psychiatry  
CSTS, USU

**Joshua Ruff, BA**  
Senior Manager, Finance  
Operations  
Department of Psychiatry  
CSTS, USU

## **CSTS FELLOWSHIP AWARD RECIPIENTS**

**Mydirah Littlepage-Saunders**

## **MILITARY SUPPORT OPERATIONS**

**MSgt Jessica Moore**

## **STAFF**

**Myshak Abdi**  
**Mona Al-Bizri**  
**Kirstin Battles**  
**Rina Berman**  
**Ashley Bernard**  
**Jennifer Bivin**  
**Nur Bookwala**  
**Alison Clark**  
**Sama Elmahdy**  
**Aamina Khattak**  
**Benjamin Kruger**  
**Xiaoxia Li**  
**Carina Martin**  
**Sierra Martin**  
**Sabreen Mohammed**  
**Hanna Nettles**  
**Rony Ngamliya-Ndam**

**Rehana Naik Olson**  
**Samuel Nunn**  
**Nicole Schlegel**  
**Jessica Simanjuntak**  
**Luke Sumberg**  
**Sonia Warrior**  
**Miahjé Williams**  
**Qing-Feng Yang**

## **STRATEGIC BOARD MEMBERS**

**Terry M. Rauch, PhD (Chair)**  
Director, Medical Research and  
Development  
Health Readiness Policy and  
Oversight, Health Affairs  
DoD

**Amy B. Adler, PhD**  
Senior Scientist, Center for  
Military Psychiatry and  
Neuroscience  
WRAIR

**Matthew E. Kleiman, MSW  
RADM, USPHS**  
Assistant Surgeon General  
USPHS

**Harvey B. Pollard, MD, PhD**  
Department of Anatomy,  
Physiology & Genetics  
USU

**David Riggs, PhD**  
Professor, Director for the Center  
for Deployment Psychology  
USU

**Rudy P. Rull, PhD, MPH**  
Principal Investigator, Millennium  
Cohort Study  
Department Head, Deployment  
Health Research  
Naval Health Research Center

**Paula P. Schnurr, PhD**

Executive Director, National  
Center for Posttraumatic Stress  
Disorder  
VA

**Delores Johnson Davis, MA,  
MSW**

Federal Executive (Retired)

**Dori B. Reissman, MD, MPH**

RADM, USPHS (Retired)

**Eric B. Schoomaker, MD, PhD**

LTG, USA (Retired)  
Department of Military and  
Emergency Medicine  
USU  
Former US Army Surgeon General  
and  
Commanding General of the US  
Army Medical Command

**SCIENCE  
COLLABORATIVE  
MEMBERS****James E. Barrett, PhD**

Emeritus Professor and Former  
Chairman  
Departments of Pharmacology  
and Physiology  
Drexel University  
College of Medicine

**Paul D. Bliese, PhD**

Professor  
Department of Management  
University of South Carolina  
Darla Moore School of Business

**Robert Bossarte, PhD**

Professor  
Departments of Psychiatry and  
Behavioral Neurosciences  
University of South Florida  
Adjunct Professor  
Department of Psychiatry  
CSTS, USU

**David Brody, MD, PhD**

Professor  
Department of Neurology Director  
Center for Neuroscience and  
Regenerative Medicine  
USU

**M. Richard Fragala, MD**

COL, USAF, MC, FS (Ret.)  
Professor  
Department of Psychiatry  
USU

**Matthew J. Friedman, MD, PhD**

Professor  
Department of Psychiatry  
Professor  
Department of Pharmacology &  
Toxicology  
Dartmouth University  
Geisel School of Medicine  
Director Emeritus  
Leahy-Friedman National  
PTSD Brain Bank  
Senior Advisor  
National Center for PTSD  
VA

**Harry C. Holloway, MD**

COL, MC, USA (Ret.)  
Professor Emeritus  
Department of Psychiatry  
USU

**Ronald C. Kessler, PhD**

McNeil Family Professor  
Department of Health Care Policy  
Harvard Medical School

**Craig H. Llewellyn, MD**

Professor  
Department of Military &  
Emergency Medicine  
USU

**Irwin Lucki, PhD**

Professor and Chair  
Department of Pharmacology &  
Molecular Therapeutics  
USU

**Matthew K. Nock, PhD**

Edgar Pierce Professor and Chair  
Department of Psychology  
Harvard University

**Francis O'Conner, MD, MPH**

COL, MC, USA  
Professor  
Department of Military &  
Emergency Medicine  
USU

**Harvey B. Pollard, MD, PhD**

Professor  
Department of Anatomy,  
Physiology & Genetics  
USU

**Robert M. Post, MD**

Head  
Bipolar Collaborative Network  
Former Chief  
Biological Psychiatry Branch  
NIMH

**David Riggs, PhD**

Professor and Chair  
Department of Medical & Clinical  
Psychology  
Executive Director  
Center for Deployment  
Psychology  
USU

**Arieh Y. Shalev, MD**

Professor  
Department of Psychiatry  
New York University Professor  
Department of Psychiatry  
Hadassah University School of  
Medicine



**M. Katherine Shear, MD**  
Professor  
Department of Psychiatry in Social  
Work  
Columbia University School of  
Social Work  
Columbia University College of  
Physicians and Surgeons  
Director, Center for Complicated  
Grief  
Columbia University

**Murray B. Stein, MD, MPH**  
VA San Diego Healthcare System  
Distinguished Professor  
Departments of Psychiatry and  
Family Medicine & Public  
Health  
University of California, San Diego

**Lars Weisaeth, MD**  
Professor  
Division of Disaster Psychiatry  
University of Oslo

## **DISTINGUISHED FORMER SCIENCE COLLABORATIVE MEMBERS & EMERITUS FRIENDS OF CSTS**

**Herbert A. Hauptman, PhD**  
(1917-2011)  
1985 Nobel Laureate,  
Chemistry  
President  
Hauptman-Woodward  
Medical Research Institute  
Research Professor  
Department of Biophysical  
Sciences  
Adjunct Professor  
Department of Computer  
Science  
University of Buffalo

**Joshua Lederberg, PhD,**  
**ForMenRS**  
(1925-2008)  
1958 Nobel Laureate, Physiology  
or Medicine  
Professor Emeritus  
Department of Molecular  
Genetics and Informatics  
Rockefeller University  
Founder, Department of Medical  
Genetics  
University of Wisconsin –  
Madison

**David H. Marlowe, PhD**  
(1931-2014)  
Senior Lecturer  
Department of Psychiatry  
USU  
Former Chief  
Department of Military  
Psychiatry  
WRAIR Fellow  
American Anthropological  
Association



*The second season of the Let's Talk About Your Guns podcast was produced in 2024 and is available @ <https://www.cstsonline.org/suicide-prevention-program/podcasts/lets-talk-about-your-guns>*

# Partnerships

The Center has worked with organizations in the public and private sectors through research partnerships, project collaborations, consultations and trainings. CSTS would like to acknowledge and thank our partners and collaborators listed below:

Administration for Strategic Preparedness and Response (ASPR)  
Alfred P. Sloan Foundation  
American Academy of Child and Adolescent Psychiatry (AACAP)  
American Association for the Advancement of Science (AAAS)  
American Gold Star Mothers, Inc.  
American Psychiatric Association (APA)  
American Psychological Association (APA)  
Architect of the Capitol  
Armed Forces Retirement Home  
Army National Guard (ARNG)  
Broad Institute  
The Carter Center  
Catholic University of America (CUA)  
Center for Health Care Research Medical University of South Carolina (MUSC)  
Centers for Disease Control and Prevention (CDC)  
Columbia University  
Columbia University Mailman School of Public Health  
Cornell University  
Dartmouth University  
Defense Advanced Research Projects Agency (DARPA)

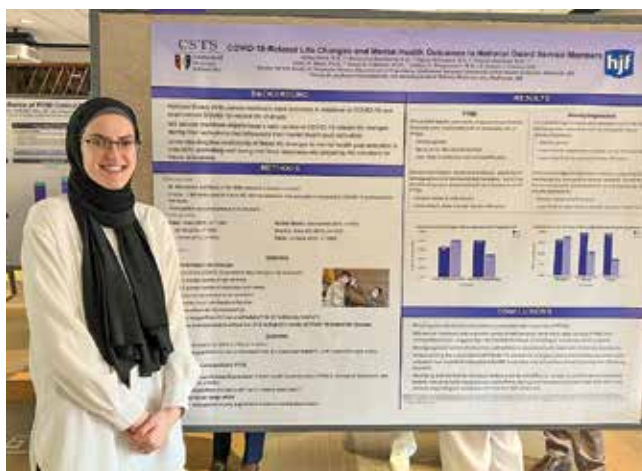
Defense Centers of Excellence for Psychological Health and Traumatic Brain Injury (DCOE TBI)  
Defense Health Agency (DHA)  
Defense Institute for Medical Operations (DIMO), Mexico  
Department of Behavioral Health (DBH), The District of Columbia  
Department of Homeland Security (DHS)  
Deployment Health Clinical Center  
Disaster Psychiatry Canada  
Dover Air Force Base  
Drexel University  
European College of Neuropsychopharmacology (ECNP)  
Federal Bureau of Investigation (FBI)  
Federal Emergency Management Agency (FEMA)  
Florida Department of Health  
Fort Bragg, NC (renamed Fort Liberty)  
Fort Hood, TX (renamed Fort Cavazos)  
Fort Lee, VA (renamed Fort Gregg Adams)  
Fort Stewart, GA  
George C. Marshall Center for European Security  
Gold Star Wives of America, Inc.  
Harvard Medical School  
Harvard T.H. Chan School of Public Health  
Henry M. Jackson Foundation for the Advancement of Military Medicine, Inc. (HJF)  
Human Performance Resources by CHAMP (HPRC)

Immigration and Customs Enforcement (ICE)  
International Initiative on Mental Health Leadership (IIMHL)  
International Ministerial Five Eyes Alliance  
International Society for Traumatic Stress Studies (ISTSS)  
Israel Defense Forces (IDF)  
Embassy of Italy, Washington, DC  
Joint Base Lewis-McChord  
Joint Mortuary Affairs Center (JMAC) and School, Fort Lee (renamed Fort Gregg-Adams)  
Las Vegas Psychiatric Association  
Mass General Brigham  
Military Child Education Coalition (MCEC)  
Military Mortuary Affairs (MA)  
University of Miami Miller School of Medicine  
Mozambique Defence Armed Forces  
National Association for PTSD  
National Association of State Mental Health Program Directors (NASMHPD)  
National Center for Post-Traumatic Stress Disorder of the VA (NCPTSD)  
National Child Traumatic Stress Network (NCTSN)  
National Committee for Employer Support of the Guard and Reserve (ESGR)  
National Defense Medical Center, Taiwan  
National Fallen Firefighters Foundation  
National Guard Bureau (NGB)  
National Institute for Occupational Safety and Health (NIOSH)

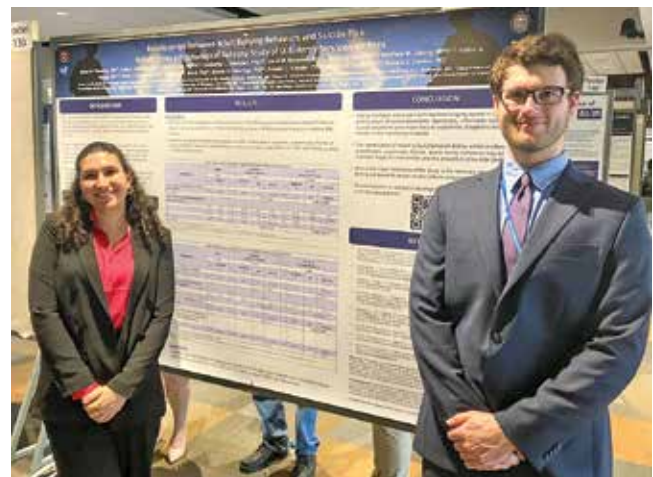
National Institute of Mental Health (NIMH)  
 National Institutes of Health (NIH)  
 National Military Family Association (NMFA)  
 National Intrepid Center of Excellence (NICoE)  
 North Atlantic Treaty Organization (NATO)  
 Norwegian Armed Forces  
 Rockefeller University  
 Rutgers University Cell & DNA Repository (RUCDR)  
 Rutgers School of Social Work  
 Armed Forces of Senegal  
 Sesame Workshop  
 Stanford University  
 State of California  
 State of Colorado  
 State of Texas  
 State of Maryland  
 Substance Abuse and Mental Health Services Administration (SAMHSA)  
 Syracuse University  
 Syracuse VA Medical Center  
 Tragedy Assistance Program for Survivors (TAPS)

Tulane School of Social Work  
 Ukraine  
 Uniformed Services University (USU)  
 Union Pacific Railroad  
 US Agency for International Development (USAID)  
 US Air Force (USAF)  
 US Army (USA)  
 US Army Family Advocacy Program (FAP)  
 US Army Family Programs  
 US Army Installation Management Command (IMCOM)  
 US Army Medical Research & Development Command (MRDC)  
 US Coast Guard (USCG)  
 US Department of Defense (DoD)  
 US Department of Energy (DoE)  
 US Department of Health and Human Services (DHHS)  
 US Department of Homeland Security (DHS)  
 US Department of Justice (DOJ)  
 US Department of State (DoS)  
 US Department of Veterans Affairs (VA)  
 US National Guard (NG)

US Postal Service (USPS)  
 University of California – Los Angeles (UCLA)  
 University of California – San Diego (UCSD)  
 University of Michigan  
 University of Pennsylvania  
 University of Pittsburgh  
 University of Virginia (UVA)  
 University of Virginia's Critical Incident Analysis Group (CIAG)  
 University of Washington  
 Washington VA Medical Center  
 Vibrant Emotional Health  
 Walter Reed Army Institute of Research (WRAIR)  
 Walter Reed National Military Medical Center (WRNMMC)  
 World Psychiatric Association (WPA)  
 Wright State University  
 Yale University  
 Yale School of Medicine and VA Connecticut Healthcare System (VACHS)  
 Yellow Ribbon Reintegration Program (YRRP)  
 Zero to Three




*Amila Odeh poster presentation at USU Research Days.*



*Sama Elmahdy and Luke Sumberg poster presentation at USU Research Days.*





Center for the Study of Traumatic Stress

CSTS

Department of Psychiatry | Uniformed Services University | 4301 Jones Bridge Road, Bethesda, MD 20814-4799 | www.CSTSonline.org

## UNDERSTANDING MORAL INJURY

**What is Moral Injury (MI)?**

- MI is characterized by intense and persistent negative thoughts and feelings, such as guilt, shame, and remorse about behaviors that are in violation of what one believes to be just, honorable, or decent.
- MI can result from self-perceived failures to live up to one's own moral expectations, or witnessing perceived moral violations or failures of one's leadership, organization, or community to prevent harm.
- Although MI can result from non-threatening situations, it often occurs when sudden actions are required during dire or life-threatening situations.
- MI is a topic of increasing interest as its definition is further clarified.

**Who is at risk for MI?**

- Military service members, first responders, law enforcement, health care providers, and child protective service professionals are among professional groups more likely to face situations that lead to MI.
- Examples of situations that can lead to MI include:
  - A military service member kills a noncombatant in response to a sense of danger to self or others, but later learns that the person was unarmed.
  - A health care provider needs to make triage decisions after a major disaster regarding who receives care, resulting in the death of those that can't be quickly treated.
  - Firefighters are unable to rapidly extinguish a fire in a neighborhood, resulting in a perceived failure to prevent severe injuries and deaths.
  - A police officer observes a superior falsely incriminating an innocent defendant.

**MI can result in a range of behaviors that can negatively affect functioning including:**

- Withdrawal from social situations and loneliness; difficulties completing daily activities (i.e., self care, eating); occupational burnout; substance misuse; sleep disturbance; poor job satisfaction; suicidal ideation; irritability toward others; interpersonal conflict; and development of mental disorders (e.g., depression, anxiety).


**MI often co-occurs with posttraumatic stress disorder (PTSD), but is distinct**

- Although both MI and PTSD can result from high stress situations and traumatic experiences, they are different.
  - PTSD involves intrusive and distressing symptoms resulting from a life-threatening event.
  - MI involves guilt, shame, or betrayal from the perceived violation of one's deeply held beliefs.
- MI can arise in the absence of post-traumatic symptoms.
- Individuals with PTSD can also experience MI if the traumatic experience involved perceived moral violations.
- The treatment of PTSD symptoms and MI are different.

**What can help a person struggling with MI?**

- Early intervention after experiencing a potentially morally violating event can be beneficial.
- Possible actions for relieving MI include:
  - Holding open and non-defensive discussions about the perceived morally injurious event
  - Reminding people that sometimes things don't turn out well and it's not their fault
  - Huddling after stressful events and allowing leaders to address issues of self-blame and misperceptions
  - Leadership being accountable for wrongful actions
  - Recognizing those involved in problematic events may fear consequences for their actions.
  - Accepting responsibility for one's actions while maintaining a fair and balanced perspective of events
  - Appreciating challenges to making decisions and acting in high stakes circumstances
  - Recognizing limitations of personal agency (i.e., little time to think before acting, lack of adequate knowledge, limited visibility)
  - Forgiving oneself or others for actions outside of one's control
  - Seeking help from friends, colleagues, and family
  - Seeking professional help (e.g., behavioral health, spiritual guidance)
- Some treatments (i.e., cognitive behavioral therapy, acceptance and commitment therapy, cognitive processing therapy) have shown to be helpful.

*Continued*



Center for the Study of Traumatic Stress

CSTS

Department of Psychiatry | Uniformed Services University | 4301 Jones Bridge Road, Bethesda, MD 20814-4799 | www.CSTSonline.org

## COPING WITH STRESS FOLLOWING A MASS SHOOTING

Mass shootings and other disaster events can be extremely stressful. Mobile devices and the internet provide instant access to the details of these events, but can also overwhelm us. Graphic images and videos, often seen in real time, can be very distressing. The seemingly random nature of these events as well as the 24/7/365 access to information about disasters around the world can leave us feeling unsafe and in persistent danger after a mass shooting occurs. Constantly feeling unsafe can lead to a variety of behaviors such as trouble sleeping, irritability, difficulty concentrating, increased use of alcohol and tobacco, social isolation, and fear of those around us. In addition to the imagery, news commentary and political rhetoric that surround these events can enhance distress as well as mistrust, and further community divisions.

It is important to manage our response to mass shootings so we are able to care for ourselves, our families, and our communities.

Below are steps to help people cope more effectively with stress after a mass shooting.

- Difficulty with sleep, irritability, and trouble concentrating are normal responses following a mass shooting; talk with your Primary Care Provider if these persist or cause problems with relationships or performance at home or work.
- Stay connected with other people such as friends, family, and neighbors, that provide positive and helpful support; social support helps people recover from stressful situations.
- If going to public places or traveling causes distress, go with other people or in groups until distress reduces.
- Check in with other people that were affected; reaching out to connect with others can be helpful to both of you.
- Avoid increasing alcohol and tobacco to cope with stress; use behavioral techniques to relax (such as breathing, imagery, and muscle relaxation) that do not have negative health effects.

**Additional Resources**

- National Child Traumatic Stress Network – Catastrophic Violence Resources <https://www.nctsn.org/what-is-child-trauma/trauma-types/terrorism-and-violence>
- Center for the Study of Traumatic Stress <http://www.cstsonline.org>



Center for the Study of Traumatic Stress

CSTS

Department of Psychiatry | Uniformed Services University | 4301 Jones Bridge Road, Bethesda, MD 20814-4799 | www.CSTSonline.org

## SAFETY, RECOVERY AND HOPE AFTER DISASTER

### HELPING COMMUNITIES AND FAMILIES RECOVER

Disasters can present a cascade of impacts to those affected—individuals, families and communities. These disasters often promote feelings of fear, confusion, grief, helplessness, anxiety, anger, guilt and even diminished confidence in self or others. A variety of helpful interventions can assist individuals and communities to recover.


Following a disaster, governments and relief organizations play an important role in reducing distress for both victims and the broader society.

- Continue to provide accurate information about the disaster or trauma and the relief efforts. This will help people understand the situation (calming). Help people contact friends or loved ones (connectedness).
- Keep families together; keep children with parents or other close relatives whenever possible (connectedness).
- Give practical suggestions that encourage people towards helping themselves and meeting their own needs (self-efficacy).
- Direct people to locations of available government and non-government services (hopefulness).
- If you know that more help and services are on the way, remind people of this when they express fear or worry (hopefulness).

**DO NOT:**

- Force people to share their stories with you, especially very personal details (may decrease calming).
- Give simple reassurances like "everything will be ok" or "at least you survived" (often diminishes calmness).
- Tell people what you think they should be feeling, thinking or doing now or how they should have acted earlier (decreases self-efficacy).
- Tell people why you think they have suffered by giving reasons about their personal behaviors or beliefs (also decreases self-efficacy).
- Make promises that may not be kept (decreases hope).
- Criticize existing services or relief activities in front of people in need of these services (diminishes hope and calming).

*Continued*



Center for the Study of Traumatic Stress

CSTS

Department of Psychiatry | Uniformed Services University | 4301 Jones Bridge Road, Bethesda, MD 20814-4799 | www.CSTSonline.org

## MANAGING STRESS DURING ORGANIZATIONAL CHANGE

Changes in the workplace such as restructuring, downsizing, or shifts in organizational priorities can create uncertainty and stress, often making it difficult for individuals to effectively manage daily responsibilities. Questions about possible loss of employment can understandably bring additional stress and anxiety. Recognizing normal stress responses and adopting strategies for both the workplace and home can help maintain our ability to function while managing with challenging times.

Changes in the workplace such as restructuring, downsizing, or shifts in organizational priorities can create uncertainty and stress, often making it difficult for individuals to effectively manage daily responsibilities.

**1. At Work**

- Practice self-care at work:** Take short breaks, step outside, and engage in breathing exercises to stay grounded. Ensure that you are eating enough and drinking enough water throughout the day. Limit consumption of caffeine, which can increase stress.
- Maintain routine and structure:** Consistency provides a sense of control in uncertain times.
- Focus on task management:** Break down work into manageable steps to prevent feeling overwhelmed.
- Seek and share support:** Being connected to others can be helpful. Share concerns with trusted colleagues and supervisors. Recognize that your colleagues may be experiencing stress differently. Show patience, offer encouragement, and support one another during periods of change and uncertainty to build shared resilience.
- Limit exposure to workplace negativity:** Avoid speculation that fuels anxiety. If workplace news is causing distress, consider taking breaks from it, and balance difficult conversations with constructive or uplifting activities.
- Stay informed from reputable sources:** During uncertain times rumors can abound. Ensure information is valid and up-to-date before acting upon it. Official workplace communications should be trusted and prioritized.
- Seek professional help:** If you are struggling with the level of distress you are experiencing, contact someone who can provide professional assistance (e.g., primary care provider, mental health clinician, spiritual advisor).

**Common Reactions to Stress**

During times of change, it is common to experience a range of emotional and physical stress responses, including:

- Sleep disruptions:** Trouble falling asleep, staying asleep, or experiencing restless nights may occur.
- Emotional responses:** Feelings of helplessness, frustration, or fear of the unknown, may be challenging to manage. These feelings may lead to increased irritability or problematic anger, that cause us to act in ways that are hurtful to ourselves or those around us.
- Distressed thinking:** Increased uncertainty can lead to overthinking, rumination, and a heightened sense of threat.
- Panic:** Less commonly, physical symptoms, such as shortness of breath, racing heart, dizziness, and difficulty concentrating may arise.

**Practical Actions to Manage Stress**

During times of uncertainty, taking proactive steps can help manage stress and improve overall well-being. Below are practical strategies for both the workplace and home to maintain balance and resilience with the goals of *staying calm, focusing on the things you can control, staying connected with others, and maintaining hope in the face of uncertainty.*

*Continued*

Examples of knowledge dissemination via CSTS fact sheets.



*Winning team at Department of Psychiatry off-site meeting (sitting L to R: Drs. Fullerton and Mash, standing: Eliza Narvaez, Evan Salerno, Drs. Thomas Nassif and Stephen Cozza).*



*CSTS field trip to the National Guard Memorial Museum, Washington DC.*

## FUNDED GRANTS

EXTERNALLY FUNDED AWARDS (Jan-Dec 2024)	FUNDING INSTITUTION
Pilot Trial Comparing Exposure and Non-Exposure Treatments for Post-trauma Nightmares and Insomnia: Nightmare Deconstruction and Reprocessing vs. NightWare Wristband (NDR)	Defense Health Program (DHP)
Brain Bank Project: Consortium for the Translational Neuroscience and Treatment of Stress and PTSD (VA Biorepository Brain Bank: PTSD Brain Bank Protocol)	Department of Veterans Affairs (VA)
Study to Assess Risk and Resilience in Servicemembers – Longitudinal Study (STARRS-LS)	Defense Health Program (DHP)
Central Nervous System (CNS) Correlates Study	Military Operational Medicine Research Program (MOMRP)
Army National Guard Behavioral Health Project (ARNG BH)	Army National Guard (ARNG)
National Guard Bureau (NGB) Joint Staff Prevention Workforce Project	National Guard Bureau (NGB)
Center for the Study of Traumatic Stress (CSTS) Program	Defense Health Program (DHP)
Grief and Health-Related Quality of Life in World Trade Center (WTC) Survivors: Associations with Bereavement, Trauma Exposures, and Mental and Physical Health Conditions	Centers for Disease Control and Prevention (CDC)
Targeting Family Risk Associated with Unsafe Firearm Storage Practices	Military Operational Medicine Research Program (MOMRP)
A Phase 2, Multi-center, Multi-Arm, Randomized, Placebo-Controlled, Double-Blind, Adaptive Platform Trial to Evaluate the Safety, Tolerability and Efficacy of Potential Therapeutic Interventions in Active-Duty Service Members and Veterans with PTSD (M-PACT)	US Army Medical Research and Development Command (MRDC)
Emotion Regulation and Cognitive Flexibility Program (ERCFP): Targets for Improving Psychological Health and Enhancing Performance (STRENGTHEN)	Defense Advanced Research Projects Agency (DARPA)
Pre-Deployment and Deployment-Related Risk and Resilience Factors for Insomnia in Military Personnel	Military Operational Medicine Research Program (MOMRP)
Resilience and Stress in Homeland Security Employees (RSHSE)	Department of Homeland Security (DHS)
Alcohol & Substance Use Prevention and Recovery Program (ASUPR)	Defense Health Program (DHP)
Tele-Sleep OSA: Clinical Effectiveness, Implementation, and Economic of Telehealth Care for Obstructive Sleep Apnea in the Military Health System	University of Maryland – Baltimore (UMB)
Suicide Avoidance Focused Enhanced Group Using Algorithm Risk Detection (SAFEGUARD)	Defense Health Program (DHP)



# Faces of CSTS



*Drs. Dori Reissman and Carol Fullerton enjoying Dr. Brian Flynn's retirement ceremony.*

---



*CSTS Research Assistants.*

---



*CSTS Research Assistants.*

---



*Natasha Dhanraj's Navy induction ceremony presided over by Dr. Stephen Cozza.*


---



*Dr. Brian Flynn welcoming Drs. Jeffrey Thomas and Elle Cleaves to his retirement ceremony.*

---





Center for the Study of Traumatic Stress  
Department of Psychiatry  
Uniformed Services University  
4301 Jones Bridge Road, Bethesda, MD 20814-4799  
[www.CSTSonline.org](http://www.CSTSonline.org)

