

PROGRAM

16th Annual

Amygdala, Stress, and PTSD Conference: Cells, Circuits, Sensors, and Stress

April 19, 2022

Virtual Conference



The Amygdala, Stress, and PTSD Conference at the Uniformed Services University brings together scientists and clinicians working towards solving the biological basis of stress, fear, and post-traumatic stress disorder.

PROGRAM

16th Annual

Amygdala, Stress, and PTSD Conference: Cells, Circuits, Sensors, and Stress

April 19, 2022

Virtual Conference

SPONSORED BY: The Center for the Study of Traumatic Stress (USU), Department of Psychiatry (USU), Neuroscience Program (USU), and Department of Family Medicine (USU)



www.AmygdalaPTSDconference.org

Background

The Center for the Study of Traumatic Stress (CSTS) of the Uniformed Services University (USU), in collaboration with the USU Department of Psychiatry, USU Neuroscience Program, and USU Department of Family Medicine, is pleased to present the *16 Annual Amygdala, Stress, and PTSD Conference: Cells, Circuits, Sensors, and Stress*.

The Amygdala, Stress, and PTSD Conference at the Uniformed Services University brings together scientists and clinicians working towards solving the biological basis of stress, fear, and posttraumatic stress disorder.

Table of Contents

Table of Contents.....	1
Agenda.....	2
Speakers.....	3
Moderators.....	8
Conference Leadership.....	9
Continuing Education.....	13
Conference Committee.....	15
About Us.....	16
Posters.....	17

Agenda

0900–0905	Conference Announcements — LTC Vincent F. Capaldi, II, ScM, MD, LTC, MC, USA
0905–0915	Welcome and Introduction — Robert J. Ursano, MD
0915–1000	<i>Operating in High-Stress Contexts: The Role of Peers in Responding to an Acute Stress Reaction</i> — Amy Adler, PhD
1000–1045	<i>Using New Technologies to Advance the Understanding, Prediction, and Prevention of Suicidal Behavior</i> — Matthew K. Nock, PhD
1045–1115	Break and <u>Poster Review</u>
1115–1145	Discussion Panel 1 — MODERATOR: LTC Rohul Amin, USA, MD, FAPA, FACP Amy Adler, PhD; Matthew K. Nock, PhD
1145–1245	Lunch
1245–1330	<i>A Mouse-to-Human Approach to Understand the Role of the Extended Amygdala in Stress and Alcohol Use Disorder</i> — Danny G. Winder, PhD
1330–1415	<i>Towards Mapping the Cell Type-Specific Regulome of Stress Disorders</i> — Matthew Girgenti, PhD
1415–1445	Break and <u>Poster Review</u>
1445–1530	<i>Neural Mechanisms of PTSD and Their Implications for Treating PTSD</i> — Richard Bryant, PhD
1530–1545	Break
1545–1615	Discussion Panel 2 — MODERATOR: Eric Meyer, Maj, USAF, MD, PhD, MC Danny G. Winder, PhD; Matthew Girgenti, PhD; Richard Bryant, PhD
1615–1630	Closing Remarks — David M. Benedek, MD

All times are listed in U.S. Eastern Time and are subject to change.

Speakers

AMY ADLER, PHD



Amy Adler, Ph.D., is a clinical research psychologist and senior scientist with the Center for Military Psychiatry and Neuroscience at the Walter Reed Army Institute of Research (WRAIR). She obtained a B.A. in economics from Brown University, and an M.A. and Ph.D. in clinical psychology from the University of Kansas. She completed her clinical internship and fellowship at Chicago-area medical centers.

Dr. Adler then served as a clinical psychologist in military health clinics in Frankfurt and Darmstadt, Germany, as an instructor with the University of Maryland-European Division, and as a research psychologist in an overseas unit of WRAIR located in Heidelberg, Germany. She later transitioned to WRAIR in Silver Spring, MD.

Besides conducting randomized trials with training and operational units, Dr. Adler has authored more than 160 articles and chapters, and co-edited seven books, including *Anger at Work* (2021) and *Deployment Psychology* (2011). She also served as an associate editor of *Military Psychology* and the *Journal of Occupational Health Psychology*. Her current roles include capability area manager with the Army's Psychological Health, Resilience, and Wellbeing research program and senior advisor to the WRAIR's Research Transition Office.

Dr. Adler received the Department of the Army Meritorious Civilian Service Award (2014, 2020) and the Commander's Award for Civilian Service (2008, 2018). She is a member of the Order of Military Medical Merit (OM3), is a Fellow of the American Psychological Association, received a Distinguished Mentor Award from the American Psychological Association (2017) and is a recipient of the Distinguished Service Award from The Military Health Systems Research Symposium (2019).

Dr. Adler's current research interests include emotion regulation strategies, small-team adaptability, behavioral health leadership, and rapid peer-based interventions to reduce acute stress.

Speakers, Continued

MATTHEW K. NOCK, PHD



Matthew K. Nock, Ph.D., is the Edgar Pierce Professor of Psychology, Harvard College Professor (2019–2024), and Chair of the Department of Psychology at Harvard University. Dr. Nock received his Ph.D. in psychology from Yale University (2003) and completed his clinical internship at Bellevue Hospital and the New York University Child Study Center (2003).

Dr. Nock's research is aimed at advancing the understanding why people behave in ways that are harmful to themselves, with an emphasis on suicide and other forms of self-harm. His research is multidisciplinary in nature and uses a range of methodological approaches (e.g., epidemiologic surveys, laboratory-based experiments, clinic-based studies, digital monitoring via smartphones and biosensors, and web- and social-media-based experiments) to better understand how these behaviors develop, how to predict them, and how to prevent their occurrence. This work is funded by grants from the US National Institutes of Health, US Department of Defense, US Army, and private foundations and has been published in over 300 scientific papers.

Dr. Nock's work has been recognized through the receipt of career awards from the American Psychological Association, the Association for Behavioral and Cognitive Therapies, and the American Association of Suicidology; and in 2011 he received a MacArthur Fellowship (aka "Genius Grant"). At Harvard, Dr. Nock teaches courses on statistics, research methods, self-destructive behaviors, developmental psychopathology, and cultural diversity — for which he has received teaching and mentoring awards including the Roslyn Abramson Teaching Award, the Petra Shattuck Prize, and the Lawrence H. Cohen Outstanding Mentor Award.

Speakers, Continued

DANNY G. WINDER, PHD



Danny G. Winder, Ph.D., is a Professor of Molecular Physiology and Biophysics, Psychiatry and Behavioral Sciences and Pharmacology at Vanderbilt University. Dr. Winder received his B.S. from North Georgia College, and his Ph.D. in Neuroscience from Emory University in 1995. After completing a postdoctoral fellowship with Nobel Laureate Eric Kandel, M.D., at Columbia University College of Physicians & Surgeons, he joined the Vanderbilt faculty in 1999 as assistant professor of Molecular Physiology and Biophysics. He was promoted to full professor in 2010.

A neuroscientist focused on stress and addiction, Dr. Winder has been particularly interested in determining mechanisms that modulate synaptic plasticity, and how and when these processes are disrupted by stress and during Alcohol/Substance Use Disorder. To accomplish these goals, he and his colleagues have pioneered the use of whole cell patch clamp and extracellular recordings in *ex vivo* brain slice preparations containing key stress circuits.

In 2013, Dr. Winder received a NARSAD Distinguished Investigator Award and in 2016 a MERIT Award from NIAAA. In 2017, he was awarded the F. Peter Guengerich award in the School of Medicine for postdoctoral mentoring, as well as the Bixler-Johnson-Mayes Endowed Chair. He is founding director of the Vanderbilt Center for Addiction Research, which was established in 2016 to define events that drive addictive behavior and develop new treatments to sustain recovery. At the national level, he has served as an associate editor of *The Journal of Neuroscience*, section editor of *Neuropharmacology* and on the editorial board of *Molecular Pharmacology*.

Speakers, Continued

MATTHEW GIRGENTI, PHD



Matt Girgenti, Ph.D., is an Assistant Professor of Psychiatry at Yale University. Dr. Girgenti received his B.S. in Molecular Engineering from Fairfield University in 2002, and his Ph.D. from University of Connecticut in 2015. As a graduate student, he received extensive research training in molecular and cell biology, in projects examining the epigenetic basis of schizophrenia (SCZ) using neural stem cells to demonstrate a role for the SCZ-risk gene ZNF804a as a gene transcription regulator.

Dr. Girgenti is a molecular neuroscientist by training with a strong history of genomic-centric research focused on the neurobiology of stress-related disorders. His research at Yale has focused on the functional genomics of neuropsychiatric disorders, specifically PTSD, major depression, and suicide using frozen postmortem brain tissue. His lab is identifying convergent biological pathways in PTSD and depression combining single-cell molecular levels (epigenomic, transcriptomic, and proteomic) across discrete brain regions. This large multi-omics dataset is being used to identify novel neuronal and non-neuronal cell types and discovery of shared neural biomarkers harboring clinical significance in PTSD and MDD.

Dr. Girgenti has been recognized with a number of awards, including a VA VISN1 Career Development Award, a NARSAD/BBRF Young Investigator Award, and an American Foundation for Suicide Prevention Young Investigator Award. Dr. Girgenti is an expert in the field of traumatic stress, from genetics to physiology and imaging in human subjects to rodent models examining the molecular biology of prefrontal cortical and amygdala function. He has published the first studies on the genomic organization of the PTSD brain using postmortem tissue. Dr. Girgenti is also a Research Scientist at the VA National Center for PTSD and a scientific advisor for the Traumatic Stress Brain Research Group, the steering committee that oversees the NCPTSD VA Brain Bank where he co-directs the Genomics and Epigenetics Working Groups. He is also a member of the International Psychiatric Genomics Consortium (PGC) PTSD Group and the PGC Systems Biology Working Group.

Speakers, Continued

RICHARD BRYANT, PHD



Richard Bryant, Ph.D., is a Scientia Professor of Psychology at the University of New South Wales, Sydney, and Director of the Traumatic Stress Clinic in Sydney, Australia. Dr. Bryant earned his B.A. in Psychology and Religious Studies from University of Sydney and his M.Clin. and Ph.D. from Macquarie University.

Dr. Bryant has focused on the nature and treatment of PTSD for 30 years. He has conducted many longitudinal, experimental, and treatment studies in PTSD and grief, including investigating the mechanisms of PTSD using cognitive, neural, emotional, and social paradigms. Dr. Bryant has identified some of the core neural factors underpinning PTSD, grief, and mild traumatic brain injury. In recent years, his team has focused on neural and genetic factors associated with treatment response to trauma-focused psychotherapy.

Dr. Bryant has written 6 books, including *Treating PTSD in First Responders* (2021) and *Acute Stress Disorder: What It Is, and How to Treat It?* (2016), 78 book chapters, and 690 journal articles. He is an Institute for Scientific Information (ISI) Highly Cited Researcher.

Moderators

LTC ROHUL AMIN, LTC, USA, MD, FAPA, FACP



LTC Amin is a graduate of Uniformed Services University, America's medical school. He trained at NCC internal medicine/psychiatry residency program at Walter Reed and then served as the chief of internal medicine residency program. He subsequently moved to Madigan Army medical center where he was able to deploy to Kuwait. His other rotations include serving as the 7th ID psychiatrist, and chief of the Fort Belvoir residential treatment facility. He is currently the program director for the combined Army/Navy psychiatry residency program at Walter Reed.



ERIC MEYER, MAJ, USAF, MD, PHD, MC

Dr. Meyer is the Psychiatry Consultant to the US Air Force Surgeon General and Deputy Director of AF Mental Health Operations. He is also an associate professor of Psychiatry, Neuroscience, and Military & Emergency Medicine at the Uniformed Services University (USUHS). He recently completed a PhD in Health Professions Education, with a focus on the use of Entrustable Professional Activities in Undergraduate Medical Education. He previously served as the Medical Director for the 51st Mental Health Squadron at Osan Air Base, Republic of Korea. Building on that operational experience, Dr. Meyer is a lead instructor for the Defense Institute for Medical Operation's "Military and Disaster Mental Health" course, which he has delivered to coalition forces around the globe. As part of this interest, he has also published extensively on military cultural competence.

Conference Leadership

LTC VINCENT F. CAPALDI, II, SCM, MD, LTC, MC, USA



*Associate Professor (Psychiatry and Medicine)
Vice Chair of Psychiatry (Research), Uniformed Services
University
Senior Medical Scientist, Walter Reed Army Institute of Research
Scientist, Center for the Study of Traumatic Stress*

LTC Vincent F. Capaldi, II, MC, USA, is the Vice Chair of Psychiatry (Research), Uniformed Services University of the Health Sciences, Bethesda, MD and Senior Medical Scientist, Center for Military Psychiatry and Neuroscience, at the Walter Reed Army Institute of Research in Silver Spring, MD. He is an associate professor in the departments of Internal Medicine and Psychiatry at the Uniformed Services University of the Health Sciences in Bethesda, MD. Dr. Capaldi is also the program director of the National Capital Consortium combined Internal Medicine and Psychiatry residency training program and chair of the Biomedical Ethics Committee at Walter Reed National Military Medical Center. LTC Capaldi completed dual residency training in Internal Medicine and Psychiatry and fellowship in Sleep Medicine at Walter Reed National Military Medical Center. LTC Capaldi holds board certifications from the American Board of Psychiatry and Neurology and the American Board of Internal Medicine to practice General Psychiatry, Internal Medicine, and Sleep Medicine. LTC Capaldi is a Distinguished Fellow of the American Psychiatric Association and Fellow of the American College of Physicians and the American Academy of Sleep Medicine. He is a past president of the Society of Uniformed Services Psychiatrists — the Military District Branch of the American Psychiatric Association.

An alumnus of Brown University, Providence, RI, Dr. Capaldi received the following degrees from Brown: ScB in Psychology (2002), Masters in Research Psychology (2003), and MD (2007). Commissioning into the Medical Corps through the Health Professionals Scholarship Program (HPSP), Dr. Capaldi completed his dual residency training in Internal Medicine and Psychiatry in 2012 and sleep medicine fellowship in 2015. In January 2013, LTC Capaldi was appointed as officer in charge (OIC) of the Restoration Program at Bagram Air Field, Afghanistan. As OIC, LTC Capaldi was responsible for the comprehensive behavioral health restoration program, all clinical operations, and prevention activities for over 45,000 NATO troops stationed across Afghanistan. In January 2019, LTC Capaldi deployed to Iraq in support of Operation Inherent Resolve, serving as the Theater Behavioral Health Consultant, the senior behavioral health provider supporting service members in Kuwait, Iraq, Syria, and Jordan. LTC Capaldi is credited with establishing the behavioral health hotline in the CENTCOM region.

Continued

Conference Leadership, Continued

LTC Capaldi has published over 150 peer reviewed scientific articles, abstracts, presentations, and book chapters on various topics such as sleep disorders, traumatic brain injury, and post stroke depression that have appeared in several medical journals. He serves as the Fatigue Management Capabilities Area Manager for the Military Operational Research Program, Medical Research and Development Command. He also serves as the Sleep Medicine Consultant to the US Army Surgeon General. In 2019 LTC Capaldi was awarded the AMEDD “A Proficiency Designator, awarded to the top 10% of military physicians and was selected as the 2019 Surgeon General Physician Recognition winner, awarded to the top military physician by rank. His other military awards include the Order of Military Medical Merit, Meritorious Service Medal (1OLC), Joint Service Commendation Medal (1 OLC), Army Commendation Medal (1OLC), Army Achievement Medal (1OLC), Inherent Resolve Campaign Medal, Afghanistan Campaign Medal, and International Security Force Operation NATO Medal.

LTC Capaldi is supported by his wife Melinda, a US Army Reserve Officer and clinical psychologist, and two daughters, Gia (9) and Eva (6).

Visit [Google Scholar](#) for a list of Dr. Capaldi’s publications.

ROBERT J. URSANO, MD



Dr. Ursano is Professor of Psychiatry and Neuroscience at the Uniformed Services University, Bethesda, Maryland and founding Director of the Center for the Study of Traumatic Stress. He served as Chairman of the Department of Psychiatry for 25 years. In addition, Dr. Ursano is Editor of *Psychiatry*, the distinguished journal of interpersonal and biological processes, founded by Harry Stack Sullivan. Dr Ursano completed twenty years of service in USAF medical corps and retired as Colonel in 1991. He was educated at the University of Notre Dame and Yale University School of Medicine and did his psychiatric training at Wilford Hall USAF Medical Center and Yale University.

Dr. Ursano served as the Department of Defense representative to the National Advisory Mental Health Council of the National Institute of Mental Health and is a past member of the Veterans Affairs Mental Health Study Section and the National Institute of Mental Health Rapid Trauma and Disaster Grant Review Section. He is a Distinguished Life Fellow in the American Psychiatric Association. He is a Fellow of the American College of Psychiatrists. Dr. Ursano was the first Chairman of the American Psychiatric Association’s Committee on Psychiatric Dimensions of Disaster. This work greatly aided the integration of psychiatry and public health in times of disaster and terrorism. Dr. Ursano was an invited participant to the White House Mental Health Conference in 1999. He has received the Department of Defense Humanitarian Service Award, the Lifetime Achievement Award of the International Society for Traumatic Stress Studies, and APA’s Bruno Lima Award in Disaster Psychiatry. He is the recipient of the William C. Porter

Continued

Award from the Association of Military Surgeons of the United States, and a frequent advisor on issues surrounding psychological response to trauma to the highest levels of the US Government and specifically to the Department of Defense leadership.

Dr. Ursano has served as a member of the National Academies of Science, Institute of Medicine, Committee on Psychological Responses to Terrorism, Committee on PTSD and Compensation and the Committee on Nuclear Preparedness; and the National Institute of Mental Health Task Force on Mental Health Surveillance After Terrorist Attack. In addition he is a member of scientific advisory boards to the Secretary of Health and Human Services and the Centers for Disease Control. In 2012, Dr. Ursano was awarded the William C. Menninger Memorial Award for distinguished contributions to the Science of Mental Health by the American College of Physicians. In 2014, Dr. Ursano and Dr. Matthew Friedman of the VA National Center for PTSD co-founded the Friedman-Leahy Brain Bank supported through Senator Patrick Leahy (D-VT). It is the first human brain bank dedicated to PTSD. This joint effort of many people was a 12 year project developing concepts, pilot data and support. Dr. Ursano has more than 400 publications. He is co-author or editor of eight books.

Conference Leadership, Continued

DAVID M. BENEDEK, MD, DFAPA



Dr. Benedek is Professor & Chair of Psychiatry, and Associate Director/Senior Scientist at the Center for the Study of Traumatic Stress, Uniformed Services University. He is a past president of the Society of Uniformed Service Psychiatrists — the Military District Branch of the American Psychiatric Association, and a past representative to the APA Assembly. He is a Distinguished Fellow of the American Psychiatric Association. He retired from the U.S. Army in 2021 after nearly 34 years of active duty service. In addition to operational experience in Bosnia and Croatia, Dr. Benedek deployed to Cuba, Iraq, and Kuwait in conjunction with the Military Operations in those countries. Dr. Benedek served as Consultant to the U.S. Army Surgeon General for Forensic Psychiatry from 2004–2008.

Dr. Benedek received his B.A. from the University of Virginia in 1986 and his M.D. from the Uniformed Services University School of Medicine in 1991. After Internship and Residency in Psychiatry at Walter Reed Army Medical Center, was Division Psychiatrist, First Armor Division, Germany. From there, he deployed to the former Yugoslavia and delivered mental health support to U.S. and NATO Troops for Operation Joint Endeavor (1996). He returned to Walter Reed to complete forensic psychiatry fellowship training in 1998 and then served as the Assistant Chief of Inpatient Psychiatry, Walter Reed Army Medical Center. In 1999 he became Chief, Forensic Psychiatry Service, and Director, National Capital Consortium Military Forensic Psychiatry Fellowship Program at Walter Reed, and he remained in those positions until joining the USUHS/CSTS faculty in 2004. Dr. Benedek's military awards include the Defense Superior Service Medal, the Legion of Merit, the Meritorious Service (3OLC) and Army Commendation (3OLC) Medal. Other honors include the LTG Claire Chennault Award for Outstanding Military Psychiatry Faculty Member, and the American Psychiatric Association's Nancy C.A. Roeske Award for Excellence in Medical Student Education, and the Thomas Salmon Award for distinguished contributions to military psychiatry. He is also recipient of the U.S. Army Surgeon General's "A" Proficiency Designator, and a member of the Order of Military Medical Merit.

Dr. Benedek has authored or co-authored nearly 200 scientific publications, and has presented on numerous aspects of military, disaster, and forensic psychiatry at regional, national, and international professional conferences. He has served on the American Psychiatric Association's Committee on Confidentiality, was a consultant to the Association's Practice Guideline for the treatment of Acute Stress Disorder and Posttraumatic Stress Disorder work-group in the development of its practice guideline, and lead author on the 2009 guideline update. In addition to leading ongoing clinical and epidemiological studies at USUHS, he co-directs the diagnostic assessment core for the VA National PTSD Brain Bank. He is the USUHS site lead investigator for the Soldier Health Outcomes Study-B (SHOS-B) arm of the Army Study to Assess Risk and Resilience in Servicemembers (ARMY STARRS).

Continuing Education

PHYSICIANS

ACCREDITATION

This activity has been planned and implemented in accordance with the accreditation requirements and policies of the Accreditation Council for Continuing Medical Education through the joint providership of the American Psychiatric Association (APA) and Society of Uniformed Services Physicians. The APA is accredited by the ACCME to provide continuing medical education for physicians.

DESIGNATION

The APA designates this live activity for a maximum of **4.75 AMA PRA Category 1 Credits (TM)**. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

FINANCIAL DISCLOSURES

The American Psychiatric Association adheres to the ACCME's Standards for Integrity and Independence in Accredited Continuing Medical Education. Any individuals in a position to control the content of a CME activity — including faculty, planners, reviewers or others — are required to disclose all relevant financial relationships with ineligible entities (commercial interests). All relevant conflicts of interest have been mitigated prior to the commencement of the activity.

PLANNING COMMITTEE

Planners for this activity have no relevant financial relationships to disclose.

FACULTY DISCLOSURES

Matthew Nock, PhD, has the following financial relationships to disclose:
Cerebral, Inc. – Consultant

PSYCHOLOGISTS

The Center for Deployment Psychology is approved by the American Psychological Association to sponsor continuing education for psychologists. The Center for Deployment Psychology maintains responsibility for this program and its content.

Attendees are offered **1.50 credit hours for participation in the morning training, *Operating in High-Stress Contexts: The Role of Peers in Responding to an Acute Stress Reaction And Using New Technologies to Advance the Understanding, Prediction, and Prevention of Suicidal Behavior***, and **2.25 credit hours for participation in the afternoon training, *A Mouse-to-Human Approach to Understand the Role of the***

Extended Amygdala in Stress and Alcohol Use Disorder And Towards Mapping the Cell Type-Specific Regulome of Stress Disorders And Neural Mechanisms of PTSD and Their Implications for Treating PTSD. Partial credits cannot be issued. In order to receive CE for the morning session, you must attend Dr. Adler's and Dr. Nock's presentations. Similarly, in order to receive CE for the afternoon session, you must attend Dr. Winder's, Dr. Girgenti's, and Dr. Bryant's presentations. You may attend the morning training, only, the afternoon training, only, or both trainings. Please note that CEs are not offered for the panel sessions.

Participant attendance data will be collected electronically during webinars. There is a 30-day time limit post-training to complete all CE requirements. Inquiries regarding CE credits may be directed via email to julia.petrini.ctr@usuhs.edu.

CEs provided by American Psychological Association sponsors are acceptable for most licensed professionals when renewing their license and it is our experience that these CE credits have been recognized by most professional state license boards. However, please check with your board regarding the acceptability of these CE credits for this activity.

Conference Committee

Vincent F. Capaldi, II, ScM, MD, Chair

LTC, MC, USA

Associate Professor

Vice Chair, Department of Psychiatry (Research)

Program Director, Combined Internal Medicine / Psychiatry Residency

Uniformed Services University of the Health Sciences

David Mears, PhD, Co-Chair

Associate Professor

Department of Anatomy, Physiology, and Genetics

Uniformed Services University of the Health Sciences

Kwang Choi, PhD

Assistant Professor

Department of Psychiatry

Scientist

Center for the Study of Traumatic Stress

Uniformed Services University of the Health Sciences

James A. Naifeh, PhD

Research Assistant Professor

Department of Psychiatry

Scientist

Center for the Study of Traumatic Stress

Uniformed Services University of the Health Sciences

Holly H. Mash, PhD

Research Assistant Professor

Department of Psychiatry

Scientist

Center for the Study of Traumatic Stress

Uniformed Services University of the Health Sciences

Weyinshet P. Gossa, MD, MPH

Associate Professor

Department of Family Medicine

Uniformed Services University of the Health Sciences

Amy E. Steward, MSgt, USAF

Center for the Study of Traumatic Stress

Uniformed Services University of the Health Sciences

Continued

Julia Petrini, ScB

Study Coordinator

Center for the Study of Traumatic Stress

Uniformed Services University of the Health Sciences

Alexandra (Allie) Blumhorst, BS

Research Assistant

Center for the Study of Traumatic Stress

Uniformed Services University of the Health Sciences

About Us

The Amygdala Conference series is sponsored by the Center for the Study of Traumatic Stress under the direction of Robert J. Ursano MD, the USU Graduate Neuroscience Program under the direction of Kimberly Byrnes, Ph.D. and also by the Department of Family Medicine under the direction of COL Dana R. Nguyen.

Posters

Difficulties Associated with Diagnosing and Treating Late Onset Bipolar Disorder — A Case Study

Authors: Isioma Amayo¹, Vincent F. Capaldi²

Affiliations:

1. Department of Psychiatry, Walter Reed National Military Medical Center, Bethesda, MD
2. Walter Reed Army Institute of Research, Bethesda, MD

Sudden Catatonic Episodes — A Case Report

Authors: Isioma Amayo¹, Vincent F. Capaldi², Christopher Hines¹

Affiliations:

1. Department of Psychiatry, Walter Reed National Military Medical Center, Bethesda, MD
2. Walter Reed Army Institute of Research, Bethesda, MD

Stellate Ganglion Block for PTSD

Authors: Allen Bell, Stephen Rodriguez

Affiliation:

1. Walter Reed National Military Medical Center, Bethesda, MD

Potentially-Traumatic Exposures in Middle East Deployed and Non-Deployed U.S. Army Mortuary Affairs Specialist Soldiers

Authors: Quinn M. Biggs^{1,2}, Britany Mullins-Hussain^{1,2}, Julia M. Petrini^{1,2}, Arrey Thomas^{1,2}, Amy E. Steward¹, Leming Wang¹, Carol S. Fullerton¹, Robert J. Ursano¹

Affiliations:

1. Center for the Study of Traumatic Stress, Department of Psychiatry, Uniformed Services University of the Health Sciences, Bethesda, MD
2. Henry M. Jackson Foundation for the Advancement of Military Medicine, Inc., Bethesda, MD

Perceived Barriers to Seeking Mental Health Care in Military Service Members with and without Post-traumatic Stress Disorder

Authors: Quinn M. Biggs^{1,2}, Jing Wang^{1,2}, Julia M. Petrini^{1,2}, Jamiere Jefferies^{1,2}, Arrey Thomas^{1,2}, Allie Blumhorst^{1,2}, Aaron Weingrad^{1,2}, Carol S. Fullerton¹, Rohul Amin^{1,3}, Robert J. Ursano¹

Affiliations:

1. Center for the Study of Traumatic Stress, Department of Psychiatry, Uniformed Services University of the Health Sciences, Bethesda, MD

2. Henry M. Jackson Foundation for the Advancement of Military Medicine, Inc., Bethesda, MD
3. Walter Reed National Military Medical Center, Bethesda, MD

Leveraging Graph Theory to Highlight Key Neurological Mediators of TBI Potentiated Suicidal Ideation

Authors: Thomas Chacko¹, Spencer Richman¹, J. Tory Toole¹, Charity B. Breneman^{2,3}, Immanuel Babu Henry Samuel^{2,3}, Calvin Lu², Matthew J. Reinhard³, Ryan C. Brewster³, Michelle E. Costanzo^{3,4}, Gordon Broderick¹

Affiliations:

1. Center for Clinical Systems Biology, Rochester General Hospital, Rochester, NY
2. Henry M. Jackson Foundation for the Advancement of Military Medicine, Inc., Bethesda, MD
3. War Related Illness and Injury Study Center (WRIISC), Department of Veterans Affairs, Washington, DC
4. Department of Medicine, Uniformed Services University of the Health Sciences, Bethesda, MD

PTSD, Depression and Anxiety: A Unifying Bio-behavioral Feedback Model

Authors: Thomas Chacko¹, Justin Gardner¹, Cole Lyman¹, J. Tory Toole¹, Charity B. Breneman^{2,3}, Immanuel Babu Henry Samuel^{2,3}, Calvin Lu², Matthew J. Reinhard³, Ryan C. Brewster³, Michelle E. Costanzo^{3,4}, Gordon Broderick¹

Affiliations:

1. Center for Clinical Systems Biology, Rochester General Hospital, Rochester, NY
2. Henry M. Jackson Foundation for the Advancement of Military Medicine, Inc., Bethesda, MD
3. War Related Illness and Injury Study Center (WRIISC), Department of Veterans Affairs, Washington, DC
4. Department of Medicine, Uniformed Services University of the Health Sciences, Bethesda, MD

Assessment of Diet and Stress Effects in Rodent Models of Operationally-Relevant Brain Insults using a Multi-Omics Approach

Authors: James C. DeMar¹, Aarti Gautam¹, Nabarun Chakraborty¹, Allison V. Hoke¹, Stacy Ann M. Miller¹, Franco Rossetti², Andrew B. Batuure², Donna M. Wilder², Joseph B. Long², Marti Jett¹, Rasha Hammamieh¹

Affiliations:

1. Medical Readiness Systems Biology Branch, Center for Military Psychiatry and Neuroscience, Walter Reed Army Institute of Research, Silver Spring, MD
2. Blast-Induced Neurotrauma Branch, Center for Military Psychiatry and Neuroscience, Walter Reed Army Institute of Research, Silver Spring, MD

Firearm Behavioral Practices and Suicide Attempt and Ideation in U.S. Army Soldiers and Veterans

Authors: Catherine L. Dempsey^{1,2}, David M. Benedek¹, James C. West¹, Matthew K. Nock³, Kelly L. Zuromski³, Jingning Ao^{1,2}, Matthew W. Georg^{1,2}, Britany Mullins-Hussain^{1,2}, Alysse Weinberg^{1,2}, Robert M. Bossarte⁴, Robert J. Ursano¹

Affiliations:

1. Center for the Study of Traumatic Stress, Department of Psychiatry, Uniformed Services University of the Health Sciences, Bethesda, MD
2. Henry M. Jackson Foundation for the Advancement of Military Medicine, Inc., Bethesda, MD
3. Department of Psychology, Harvard University, Cambridge, MA
4. University of South Florida, Tampa, FL

RECONsolidation of Traumatic memories to ResOLve Posttraumatic Stress Disorder (RECONTROL): Preliminary Results

Authors: Kerri E. Dunbar^{1,7}, Paula G. Bellini^{1,3,7}, Hannah Atallah^{1,3,7}, Patricia T. Spangler^{2,4,6,7}, Deborah Probe Adams^{2,4,7}, Catherine L. Dempsey^{2,4,6,7}, Richard M. Gray⁸, Michael J. Roy^{1,3,5}

Affiliations:

1. Center for Neuroscience and Regenerative Medicine, Uniformed Services University of the Health Sciences, MD
2. Center for the Study of Traumatic Stress, Department of Psychiatry, Uniformed Services University of the Health Sciences, Bethesda, MD
3. Department of Medicine, Uniformed Services University of the Health Sciences, Bethesda, MD
4. Department of Psychiatry, Uniformed Services University of the Health Sciences, Bethesda, MD
5. Department of Medicine, Walter Reed National Military Medical Center, Bethesda, MD
6. Department of Psychiatry, Walter Reed National Military Medical Center, Bethesda, MD
7. Henry M. Jackson Foundation for the Advancement of Military Medicine, Inc., Bethesda, MD
8. Research and Recognition Project, Corning, NY

Alpha-Linolenic Acid Treatment Reduces the Contusion and Prevents the Development of Anxiety-Like Behavior Induced by a Mild Traumatic Brain Injury in Rats

Authors: Taiza H. Figueiredo¹, Carolina L. Harbert¹, Volodymyr Pidoplichko¹, Camila P. Almeida-Suhett¹, Hognna Pan², Katia Rossetti¹, Maria F. M. Braga¹, Ann M. Marini^{1,2}

Affiliations:

1. Department of Anatomy, Physiology and Genetics, Uniformed Services University of the Health Sciences, Bethesda, MD

2. Department of Neurology and Program in Neuroscience, Uniformed Services University of the Health Sciences, Bethesda, MD

Predictive Validity of Item 9 of the Patient Health Questionnaire in a Bereaved Sample: Comparison to the Beck Scale for Suicide Ideation

Authors: Joscelyn E. Fisher^{1,2}, Alexandra L. Blumhorst^{1,2}, Jing Zhou^{1,2}, Christian M. Ogle^{1,2}, Rafael Zuleta^{1,2}, Carol S. Fullerton¹, Robert J. Ursano¹, Stephen J. Cozza¹

Affiliations:

1. Center for the Study of Traumatic Stress, Department of Psychiatry, Uniformed Services University of the Health Sciences, Bethesda, MD
2. Henry M. Jackson Foundation for the Advancement of Military Medicine, Inc., Bethesda, MD

Involvement of Lateral Habenula Dysfunction in Repetitive Mild Traumatic Brain Injury-Induced Motivational Deficits

Author: W. Jesse Flerlage¹, Ludovic Langlois¹, Milan Rusnak¹, Aviva Symes¹, Sarah C. Simmons¹, Shawn Gouty¹, Brian M. Cox¹, Mumeko Tsuda², Fereshteh S. Nugent¹

Affiliations:

1. Department of Pharmacology and Molecular Therapeutics, Uniformed Services University of the Health Sciences, Bethesda, MD
2. Preclinical Behavioral Modeling Core, Uniformed Services University of the Health Sciences, Bethesda, MD

Metabolomic Analyses in Active Duty Military Participants

Authors: Aarti Gautam¹, Ruoting Yang¹, PTSD consortium members, Rasha Hammamieh¹, Synthia H. Mellon², Owen M. Wolkowitz², Charles Marmar³, Marti Jett⁴

Affiliations:

1. Medical Readiness Systems Biology, Walter Reed Army Institute of Research, Silver Spring, MD
2. UCSF School of Medicine, San Francisco, CA,
3. Department of Psychiatry, NYU Grossman School of Medicine, New York, NY
4. Walter Reed Army Institute of Research, Silver Spring, MD, USA

Nightmare Deconstruction and Reprocessing: Proof of Concept of a Novel Treatment for PTSD-Related Nightmares and Insomnia

Authors: Katherine Hillman^{1,2}, Marita Bolis^{1,2}, Ashley Phares^{1,2}, Jeffrey Hullfish³, Rebecca Kwasinski³, Brent Winslow³, Catherine Dempsey^{1,2}, James West¹, Patricia Spangler^{1,2}

Affiliations:

1. Center for the Study of Traumatic Stress, Department of Psychiatry, Uniformed Services University of the Health Sciences, Bethesda, MD
2. Henry M. Jackson Foundation for the Advancement of Military Medicine, Inc., Bethesda, MD
3. Design Interactive Inc., Orlando, FL

Association between blood p11 and PTSD in Service Members

Authors: Xian-Zhang Hu^{1,2}, Lei Zhang^{1*}, Xiao Xia Li^{1,2}, David M. Benedek¹, Biomarker Study Group, Robert J. Ursano¹

Affiliations:

1. Center for the Study of Traumatic Stress, Department of Psychiatry, Uniformed Services University of the Health Sciences, Bethesda, MD
2. Henry M. Jackson Foundation for the Advancement of Military Medicine, Inc., Bethesda, MD

Online Microlearning Curriculum to Promote Trauma-Informed Care

Author: Marcus Hunt

Affiliation:

1. National Capital Consortium Psychiatry Residency, Bethesda, MD

Dipsogenic Role of Angiotensin II During Fear Memory Retrieval

Authors: Laxmi Iyer¹, Adam Swiercz¹, Zhe Yu¹, Kellan Delaney³, Elizabeth Paronett¹, Peter Nemes³, Paul J. Marvar^{1,2}

Affiliations:

1. Department of Pharmacology and Physiology, School of Medicine and Health Sciences, The George Washington University, Washington, DC
2. Department of Psychiatry and Behavioral Sciences, School of Medicine and Health Sciences, The George Washington University, Washington, DC
3. Department of Chemistry and Biochemistry, University of Maryland—College Park, College Park, MD

Sleep-Focused Therapy is Associated with Trophic Factor Changes in Sleep Disturbed Military Service Members with and without Posttraumatic Stress Disorder: A Pilot Study

Authors: Amanda Jiang¹, Jacqueline Leete^{1,2}, Jessica Gill^{3,4}, Heather L. Rusch¹

Affiliations:

1. National Institute of Nursing Research, National Institutes of Health, Bethesda, MD
2. Department of Psychology, The University of Arizona, Tucson, AZ
3. School of Nursing and Medicine, Johns Hopkins University, Baltimore, MD
4. Center for Neuroscience and Regenerative Medicine, Uniformed Services University of the Health Sciences, Bethesda, MD

Responding to the COVID-19 Pandemic: Work Productivity & Psychological Responses in Activated New York National Guard Service Members

Authors: Holly B. Herberman Mash^{1,2}, Carol S. Fullerton¹, Joshua C. Morganstein¹, Hieu M. Dinh^{1,2}, Robert J. Ursano¹

Affiliations:

1. Center for the Study of Traumatic Stress, Department of Psychiatry, Uniformed Services University of the Health Sciences, Bethesda, MD
2. Henry M. Jackson Foundation for the Advancement of Military Medicine, Inc., Bethesda, MD

A Conceptual Model of Family Safety to Inform Future Research and Prevention Efforts

Authors: Christin M. Ogle^{1,2}, Aaron B. Weingrad^{1,2}, Rafael F. Zuleta^{1,2}, Jocelyn E. Fisher^{1,2}, Tasanee R. Walsh^{1,2}, Stephen J. Cozza¹

Affiliations:

1. Center for the Study of Traumatic Stress, Department of Psychiatry, Uniformed Services University of the Health Sciences, Bethesda, MD
2. Henry M. Jackson Foundation for the Advancement of Military Medicine, Inc., Bethesda, MD

Risk Factors Associated with Latent Classes of Child Neglect

Authors: Christin M. Ogle^{1,2}, Jing Zhou^{1,2}, Tashina Miller³, Stephen J. Cozza¹

Affiliations:

1. Center for the Study of Traumatic Stress, Department of Psychiatry, Uniformed Services University of the Health Sciences, Bethesda, MD
2. Henry M. Jackson Foundation for the Advancement of Military Medicine, Inc., Bethesda, MD
3. Walter Reed National Military Medical Center, Bethesda, MD

Increased Inhibitory Activity in the Basolateral Amygdala and Decreased Anxiety During Estrus: A Potential Role for ASIC1a Channels

Authors: Volodymyr I. Pidoplichko¹, Vassiliki Aroniadou-Anderjaska^{1,2}, Taiza H. Figueiredo¹, Camilla Wilbraham¹, Maria F.M. Braga^{1,2}

Affiliations:

1. Department of Anatomy, Physiology, and Genetics, Uniformed Services University of the Health Sciences, Bethesda, MD
2. Department of Psychiatry, Uniformed Services University of the Health Sciences, Bethesda, MD

Cerebellum Structural Covariance Networks in PTSD and Depression

Author: Meredith A. Reid

Affiliation:

1. AU MRI Research Center, Department of Electrical and Computer Engineering, Auburn University, Auburn, AL

Input and Population Specific Regulation of Lateral Habenula Neurons by Kappa Opioid Receptors

Authors: Sarah C. Simmons¹, Shawn Gouty¹, William J. Flerlage¹, Brian M. Cox¹, Fritz Lischka², Jeremy Smyth³, Fereshteh S. Nugent¹

Affiliations:

1. Department of Pharmacology and Molecular Therapeutics, Uniformed Services University of the Health Sciences, Bethesda, MD
2. Biomedical Instrumentation Center, Uniformed Services University of the Health Sciences, Bethesda, MD
3. Department of Anatomy, Physiology, and Genetics, Uniformed Services University of the Health Sciences, Bethesda, MD

Intrinsic CRF Neurons in LHB Regulate Anxiety-like Behavior

Authors: Sarah C. Simmons¹, William J. Flerlage¹, Mumeko Tsuda², Shawn Gouty¹, Brian M. Cox¹, Fereshteh S. Nugent¹

Affiliations:

1. Department of Pharmacology and Molecular Therapeutics, Uniformed Services University of the Health Sciences, Bethesda, MD
2. Preclinical Behavioral Modeling Core, Uniformed Services University of the Health Sciences, Bethesda, MD

In Search of the Elusive Words: A Video and Podcast Project to Find the Best Words to Encourage Help-Seeking

Authors: Adam Walsh^{1,2}, Brooke Heintz Morrissey^{1,2}, Joshua Morganstein¹, Carol Fullerton¹, Ashley Phares^{1,2}, Madeleine McGuinness^{1,2}, Robert Ursano¹

Affiliations:

1. Center for the Study of Traumatic Stress, Department of Psychiatry, Uniformed Services University of the Health Sciences, Bethesda, MD
2. Henry M. Jackson Foundation for the Advancement of Military Medicine, Inc., Bethesda, MD

Translating Brain Trauma: A Practical Approach to Suicide Prevention

Authors: Adam K. Walsh^{1,2}, Aaron B. Weingrad^{1,2}, Joshua C. Morganstein¹, Brooke Heintz Morrissey^{1,2}, Carol S. Fullerton¹, Julia M. Petrini^{1,2}, Robert J. Ursano¹

Affiliations:

1. Center for the Study of Traumatic Stress, Department of Psychiatry, Uniformed Services University of the Health Sciences, Bethesda, MD
2. Henry M Jackson Foundation for the Advancement of Military Medicine, Inc., Bethesda, MD, USA

Adversities Associated with Separation from U.S. Reserve and National Guard

Authors: Jing Wang^{1,2}, Robert Ursano¹, Hieu Dinh^{1,2}, Alysse Weinberg^{1,2}, Gregory Cohen³, Laura Sampson⁴, Sandro Galea³, Carol S. Fullerton¹

Affiliations:

1. Center for the Study of Traumatic Stress, Department of Psychiatry, Uniformed Services University of the Health Sciences, Bethesda, MD
2. Henry M. Jackson Foundation for the Advancement of Military Medicine, Inc., Bethesda, MD
3. School of Public Health, Boston University, Boston, MA
4. T.H. Chan School of Public Health, Harvard University, Cambridge, MA

Whole Genome Rare Variant Analysis of Suicide Attempt in the Army STARRS Cohort

Authors: Matthew D. Wilkerson^{1,2}, Xijun Zhang¹, Daniel Hupalo¹, Clifton Dalgard^{1,2}, Joshua C. Gray³, Camille Alba¹, Guathaman Sukumar¹, Nathaniel Lott¹, James A. Naifeh⁵, Pablo Aliaga⁵, Ronald C. Kessler⁶, Clesson Turner⁷, Harvey B. Pollard^{2,4}, Robert J. Ursano⁵, Murray B. Stein^{8,9,10}

Affiliations:

1. Precision Medicine Initiative for Military Medical Education and Research, Uniformed Services University of the Health Sciences, Bethesda, MD
2. Department of Anatomy, Physiology, and Genetics, Uniformed Services University of the Health Sciences, Bethesda, MD
3. Department of Medical and Clinical Psychology, Uniformed Services University of the Health Sciences, Bethesda, MD
4. Consortium for Health and Military Performance (CHAMP), Uniformed Services University of the Health Sciences, Bethesda, MD
5. Center for the Study of Traumatic Stress, Department of Psychiatry, Uniformed Services University of the Health Sciences, Bethesda, MD
6. Department of Health Care Policy, Harvard Medical School, Boston, MA
7. Department of Pediatrics, Uniformed Services University of the Health Sciences, Bethesda, MD
8. Department of Psychiatry, University of California—San Diego, La Jolla, CA
9. Herbert Wertheim School of Public Health, University of California—San Diego, La Jolla, CA
10. VA San Diego Healthcare System, San Diego, CA

Role of Locus Coeruleus Expressing Angiotensin Type 1 Receptors (AT₁R) Neurons in Fear Learning and Stress-induced Anxiety

Authors: Zhe Yu, Paul J. Marvar

Affiliation:

1. Department of Pharmacology and Physiology, George Washington University, Washington, DC

Notes

Please visit us at www.CSTSONline.org



www.twitter.com/CSTS_USU



www.facebook.com/USU.CSTS

CSTS



Uniformed
Services
University

Center for the Study of Traumatic Stress
Department of Psychiatry
Uniformed Services University
4301 Jones Bridge Road, Bethesda, MD 20814-4799
www.CSTSonline.org