National Center for PTSD Fiscal Year 2018 Annual Report

PTSD and **SUICIDE**



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Acronyms Used in the Text

Army STARRS

Army Study to Assess Risk and Resilience in Servicemembers

CAP

Consortium to Alleviate PTSD

CAPS-5 Clinician-Administered PTSD Scale for DSM-5

CBT-I Cognitive-Behavioral Therapy for Insomnia

CE Continuing Education

COE Center of Excellence

CPT Cognitive Processing Therapy

CRAFT Community Reinforcement and Family Training

CSP Cooperative Studies Program

DoD Department of Defense

DSM-5

Diagnostic and Statistical Manual of Mental Disorders— Fifth Edition



EBP

Evidence-Based Psychotherapy

EBT Evidence-Based Treatment

ENIGMA Enhancing Neuroimaging Genetics through Meta-Analysis

FY

Fiscal Year

ICD-11 International Classification of Diseases 11th Revision

LEC-5 Life Events Checklist for *DSM-5*

LIGHT Longitudinal Investigation of Gender, Health, and Trauma

mGluR5 Metabotropic Glutamate Receptor Type 5

MVP Million Veteran Program

MST Military Sexual Trauma

NCPS National Center for Patient Safety **NEPEC** Northeast Program Evaluation Center

NHRVS National Health and Resilience in Veterans Study

OMHSP Office of Mental Health and Suicide Prevention

PBI Network Practice-Based Implementation Network

PC-PTSD-5 Primary Care Screen for PTSD for DSM-5

PCL-5 PTSD Checklist for *DSM-5*

PE Prolonged Exposure

PGC Psychiatric Genomics Consortium

PILOTS Published International Literature on Traumatic Stress

PTSD Posttraumatic Stress Disorder

REACH-VET Recovery Engagement and Coordination for Health – Veterans Enhanced Treatment

STAIR Skills Training in Affective and Interpersonal Regulation **STRONG STAR**

South Texas Research Organizational Network Guiding Studies on Trauma and Resilience

TRACTS

Translational Research Center for Traumatic Brain Injury and Stress Disorders

TRAIN

Training Finder Real-time Affiliate Integrated Network

TVMI The Veterans Metric Initiative

UP Unified Protocol

VA Department of Veterans Affairs

Project VALOR Veterans After-Discharge Longitudinal Registry

VHA Veterans Health Administration

VISN Veterans Integrated Services Network

WET Written Exposure Therapy

WoVeN Women Veterans Network

From the Executive Director

For many years, the National Center has been involved in research and outreach efforts related to suicide prevention. Suicide is now the tenth most common cause of death in the United States and a problem that disproportionately affects the nation's Veterans, so work in this area is a clear priority for us and throughout the Department of Veterans Affairs (VA). In the introduction to this Fiscal Year (FY) 2018 Annual Report, we summarize our recent and ongoing work on the relationship between posttraumatic stress disorder (PTSD) and suicide.

Our investigators have led groundbreaking research on the epidemiology of suicide and have helped establish PTSD as an independent risk factor for suicide. Our investigators also have been involved in efforts to identify prevention and intervention strategies for suicide. As effective strategies are developed, we have leveraged our resources to disseminate best practices through our PTSD Mentoring and Consultation Programs. We are also studying novel ways to use computer modeling to help individual clinics optimize implementation of best practices in suicide prevention.

Other key research efforts in the past year include completing enrollment of more than 900 Veterans in a study of the effectiveness of Prolonged Exposure (PE) versus Cognitive Processing Therapy (CPT), continuing the Consortium to Alleviate PTSD (CAP) that is jointly funded by VA and the Department of Defense (DoD), and funding of a new VA Cooperative Studies Program (CSP) trial to examine three commonly prescribed medications for insomnia in Veterans with PTSD. Other research accomplishments are highlighted in the "Major Research Initiatives" section of this report.

In education and outreach, our efforts have benefitted Veterans as well as the community at large. We quickly responded to the many national crises that arose over the past year—including wildfires, hurricanes, and episodes of mass violence—by providing online



Paula P. Schnurr, PhD

information and clinical consultation. We developed a guide to help families and friends of those with PTSD understand the disorder. We continued development of our online and mobile applications, including updated versions of Mindfulness Coach, PE Coach, and PTSD Family Coach. Lastly, our website has been redesigned and we rebranded our publication database from Published International Literature on Traumatic Stress (PILOTS) to PTSDpubs.

We experienced some important personnel changes, too. In April 2018, Dr. Josef Ruzek retired from the Dissemination and Training Division, where he had served as Director since 2008. Dr. Craig Rosen is serving as Acting Director and Dr. Shannon Wiltsey Stirman is serving as Acting Deputy Director. Dr. Steve Southwick at our Clinical Neurosciences Division has moved into a Senior Consultant role, and Dr. Chadi Abdallah is serving as the Acting Deputy Director at this Division. Dr. Brian Marx was selected as the new Deputy Director at our Behavioral Science Division, replacing Dr. Danny Kaloupek, who retired in October after serving in this role since 1989. And at the Executive Division, Dr. Paul Holtzheimer was selected as the Deputy Director for Research.

As we approach our 30th anniversary next year, we believe the National Center continues to demonstrate excellence in our mission to improve the health and well-being of Veterans with PTSD. I hope you find this report both interesting and informative.

Paula P. Schnurr, PhD

Executive Director

Understanding the Relationship Between PTSD and Suicide: Challenges and Opportunities

Suicide is the tenth leading cause of death in the United States, and one of the few causes for which the rate is increasing over time. Critically, the rate of suicide in Veterans is higher than in the civilian population and has increased over the past two decades at a much faster pace; this is especially true for women Veterans and those not engaged in VA care. Overall, it is estimated that 20 Veterans die by suicide every day, making this an important focus for everyone who is concerned about the well-being of Veterans.

The National Center for PTSD has had an ongoing focus on suicide for many years. The relationship between suicide and PTSD is complex, but the available data generally suggest that PTSD may be an independent risk factor for suicide. The National Center therefore established "PTSD and Suicide" as a key operational priority in 2017 to formalize its efforts to increase understanding of the relationship between PTSD and suicide. The objectives are to investigate the relationship between PTSD and suicide, develop strategies to predict and prevent suicide among Veterans with PTSD, and work to ensure that systems are in place to connect Veterans with the care they need.

The Relationship Between PTSD and Suicide

"Suicidality" encompasses a range of behaviors: suicidal ideation (thinking suicidal thoughts), suicide attempts, and death by suicide. Many studies have found that PTSD is an independent risk factor for suicidal ideation and behaviors, even in the context of additional mental health issues, such as depression. Studies with Veteran samples have found that male and female Veterans with PTSD are 1.8 and 3.5 times more likely, respectively, to die by suicide than male and female Veterans who do not have PTSD.

However, the relationship between PTSD and suicidality in all its forms is not clear or straightforward. Not everyone who experiences suicidality is suffering from PTSD or from any other mental health issue, and the reverse is true as well: most people with PTSD are not suicidal. In fact, PTSD is only one of many risk factors for suicide; depression and other mental health difficulties, substance use disorders, lack of social support systems, and many other variables also increase risk for suicide. Moreover, the effect of multiple risk factors can be severe: for example, when



PTSD and depression co-occur, their effect on suicide is much greater than what could be explained by either condition independently.

Suicide is a relatively uncommon event, which makes it difficult to study directly. Suicidal ideation is more common than completed suicides, and therefore can provide larger samples for study; however, only a small percentage of those who think about suicide attempt it, and only a small portion of those who attempt suicide will die that way.

One approach to studying suicide has therefore been to use large databases that include data from many people, so that there are enough cases of suicides in the population for analysis. VA databases are useful in this way, but are often limited by the fact that they include only basic demographic, medical, and mental health

"There has been a lot of progress in understanding the epidemiology of suicide. We have a pretty good handle on the demographics—that is, what demographic groups are at higher or lower risk." information. Clinical data from VA gives an incomplete picture about suicide among Veterans, since well over half of Veterans do not use VA health care. National databases that could be suited to studying suicide often do not contain sufficient information on risk and protective

-Dr. Rani Hoff

factors, such as whether the individual had PTSD or other mental health concerns.

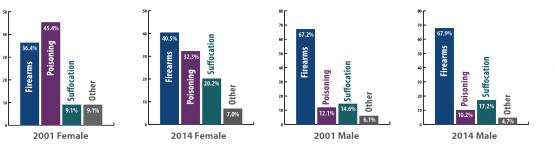
Dr. Rani Hoff, Director of the National Center's Evaluation Division, was previously Acting Director of Research and **Program Evaluation for** Suicide Prevention with the Office of Suicide Prevention. She says that, even with those limitations, "There has been a lot of progress in understanding the epidemiology of suicide. We have a pretty good handle on the demographics that is, what demographic groups are at higher or lower risk." It is clear, for example, that Veterans



Rani Hoff, MPH, PhD Director, Evaluation Division

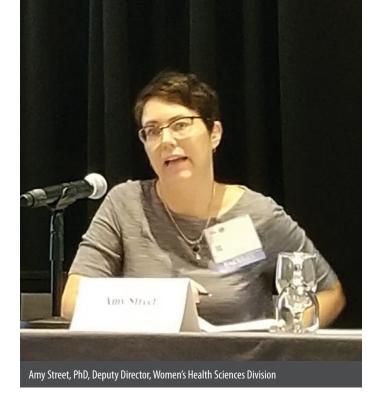
are at greater risk of suicide than the general population. In 2016, the suicide rate was 1.5 times greater for Veterans than for non-Veteran adults, after adjusting for age and gender, and the rate of suicide among Veterans increased by more than 30% between 2001 and 2014.

Male and female Veterans differ markedly in suicidality. The rate of suicide among male Veterans is nearly 40% higher than it is for civilian men, but the rate for women Veterans is 180% higher than for civilian women, and the rate for women is climbing faster than among men. Men and women attempting suicide differ in their choice of means: more than 70% of men used firearms in their suicide attempts, compared with just over 40% of women, so men's suicide attempts are more likely to end in death. Women, however, are more likely to have experienced sexual trauma, which often has more serious negative consequences than other types of trauma and is a significant predictor of subsequent suicide.



Source: U.S. Department of Veterans Affairs, Office of Mental Health and Suicide Prevention. (2018). *National strategy for preventing Veteran suicide, 2018-2028*. Retrieved from <u>https://www.mentalhealth.</u> <u>va.gov/suicide_prevention/docs/Office-of-</u> <u>Mental-Health-and-Suicide-Prevention-</u> <u>National-Strategy-for-Preventing-Veterans-</u> <u>Suicide.pdf</u>

Veteran suicide deaths by mechanism and gender in 2001 and 2014.



In the past few years, researchers have used comprehensive databases and advanced statistical methods to disentangle the complex relationships among risk factors and suicide. Dr. Amy Street, Deputy Director of the Women's Health Sciences Division, has been working with data from the Army Study to Assess Risk and Resilience in Servicemembers (Army STARRS); the dataset contains information from the records of more than 1.6 million military personnel and includes information gathered through surveys from a portion of that population. According to Dr. Street, "Our goal is to overcome some of the limitations inherent in studying suicide by using large data systems, which allow more sophisticated analytic methods."

Dr. Jaimie Gradus of the Women's Health Sciences Division has been at the forefront of using advanced analytic techniques to assess risk factors and the association between PTSD and suicide. "We know that suicide can be caused by multiple factors, often in combination, so it's hard to understand it using traditional statistical methods." A novel approach to estimating risk for suicide is machine learning, which refers to the use of high-level analytical tools and computing power to study the interrelationships among multiple factors. "Machine learning will help us to better understand the constellation of risk factors that predict suicide and related behaviors. Patients don't usually walk into their clinician's office with just one issue."

For example, in one study using machine learning, Dr. Gradus was able to study gender-specific associations

among various risk factors and suicidal ideation in a national sample of Veterans who had been deployed to Iraq and Afghanistan. She found several associations with suicidal ideation among men, including depression, PTSD, and somatic complaints. For women, sexual harassment during deployment emerged as a key factor that interacted with PTSD and depression and demonstrated a stronger association with suicidal ideation than among men.

Dr. Gradus has also been working with the Danish national health care and social registries, which contain health information on all 5.4 million citizens of Denmark. The database contains information on more than 40,000 suicides and suicide attempts. Besides the potential information to be gained from using machine learning on such a rich source of data, the size of the sample itself will allow for examination of subgroups of individuals—age and gender cohorts, for example—that will hopefully yield additional insights into which individuals are at greatest risk for suicide.



Jaimie Gradus, DSc, MPH, Investigator, Women's Health Sciences Division

Strategies to Predict and Prevent Suicide

VA has taken many steps over the years to better understand suicide and implement programs aimed at suicide prevention. The REACH-VET program (i.e., Recovery Engagement and Coordination for Health – Veterans Enhanced Treatment) seeks to identify atrisk Veterans and connect them with the specialized care and support they need. The <u>Veterans Crisis Line</u> is available 24 hours a day through phone and text to connect Servicemembers and Veterans in crisis to trained responders and other support.



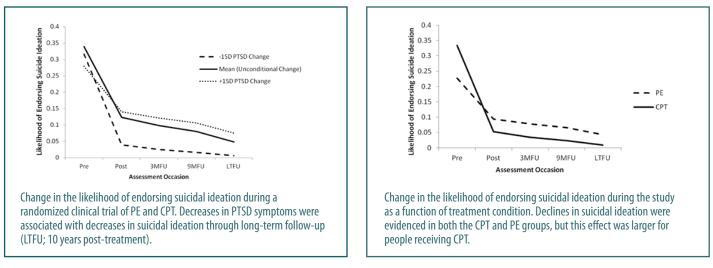
Brian Marx, PhD, Investigator and incoming Deputy Director and Alexandra Zax, BA, Research Assistant, Behavioral Science Division

Dr. Brian Marx of the Behavioral Science Division has been working to identify risk factors for suicide through <u>Project.</u> <u>VALOR (Veterans After-Discharge Longitudinal Registry)</u>, a longitudinal study that follows Veterans over time and looks at factors that influence their health and well-being, perhaps before they are at acute risk of suicide. Knowledge about risk factors can be translated into prevention strategies that directly target these factors at the most opportune time. According to Dr. Marx, "Once a person has been identified as high-risk, there are a number of interventions that can be tried."

One strategy that VA has adopted is individual "safety plans." Clinicians at VA facilities are trained to recognize patients who are at risk for suicide and to work collaboratively with them to develop a plan that specifies warning signs and outlines specific coping strategies, family contacts, and professional assistance that the patient can use. Research has shown that safety plans that are comprehensive and personalized to the unique situation of the individual patient can be very valuable for reducing risk of future suicidal behavior.

According to Dr. Marx, however, safety plans are not always as effective as they could be. "There is a need to ensure that clinicians are sufficiently trained on how to create a safety plan, and that they have the time to do it. We have found that in many cases not everyone who should have had a plan actually had one, and even for those who did, the plans were often incomplete or not sufficiently individualized." Research has shown that patients are especially vulnerable to suicide in the days immediately following discharge from the hospital, so ensuring that they leave with a high-quality safety plan can be crucial to suicide prevention.

Prevention can also be enhanced by treating the underlying mental health problems that increase risk for suicide, such as PTSD and depression. The National Center has been a leader in the development, evaluation, and implementation of treatments for PTSD, including CPT and PE, that are now widely used in clinical settings. In recent years investigators have examined the effect of these treatments on suicidal ideation. To date, evidence from National Center investigators suggests that CPT and



Examining the Effect of PTSD Treatments on Suicidal Ideation

Gradus, J. L., Suvak, M. K., Wisco, B. E., Marx, B. P., & Resick, P. A. (2013). Treatment of posttraumatic stress disorder reduces suicidal ideation. *Depression and Anxiety, 30*, 1046-1053. Doi: 10.1002/da.22117

PE do in fact reduce suicidal ideation, suggesting that trauma-focused psychotherapy may be an appropriate intervention in these cases.

A major challenge today is to find preventive strategies that work at an earlier stage of risk, prior to the onset of suicidal ideation or a first suicide attempt. "A lot of work around prevention is late-stage intervention—that is, identifying folks who have made suicide attempts and trying to help them," says Dr. Street. Researchers believe that early-stage interventions could lead to a reduction in suicides over time, but it can be difficult to demonstrate that connection scientifically. Dr. Street notes, "If we can intervene in a way that improves someone's overall quality of life now, will it pay off in less suicidal behavior in 10 or 15 years? Our goal needs to encompass the bigger picture: we don't just want to prevent suicides, but to ensure people have lives worth living."

According to Dr. Hoff, research on suicide prevention is moving into the public health arena, reaching Veterans who don't connect with the VA health system, family members, general health care providers, and others in the community. "The strategies that have the hope of greatest impact are not necessarily mental health interventions," she says. "Social networks, relationships, having the means to support a family, not being isolated or a burden to others. Some of these are mental health touch points, but many are not."

"Our goal needs to encompass the bigger picture: we don't just want to prevent suicides, but to ensure people have lives worth living."

Beyond suicide prevention efforts, there is interest in developing more direct interventions for individuals at high risk for suicide. One promising avenue for reducing acute suicidality is the substance

-Dr. Amy Street

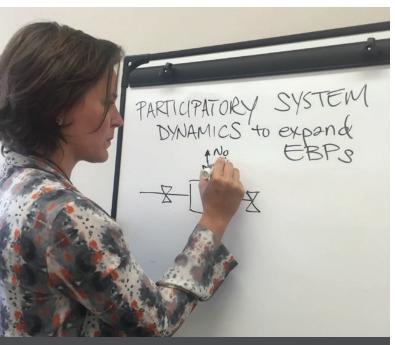
ketamine. Investigators at the National Center's Clinical Neurosciences Division are among those who discovered that ketamine has rapid-acting and robust antidepressant effects, and subsequent research has confirmed its efficacy. Rapid reductions in suicidal ideation have been demonstrated as well, sometimes within hours. This finding is especially significant, as acute suicidal thoughts and behaviors require immediate intervention; currently available antidepressant medications require weeks to months to provide clinical benefit, and often do not specifically target suicidality. Division researchers are also actively investigating the anti-suicidal effects of ketamine in individuals with both PTSD and depression.

Of course, once effective interventions have been identified, it is important to reach out to Veterans and encourage them to participate in the process. Dr. Hoff says, "The success of all these efforts depends on whether you are reaching Veterans who are willing to engage in prevention strategies and treatments. There is a stigma around mental health in general, what it means to get care through VA, and discussion of suicide itself." She is hopeful that some of the education and communication tools that the National Center has developed—mobile apps and self-assessment tools, for example—can be helpful in encouraging Veterans to engage with evidence-based mental health treatment that may reduce risk of suicide.



Behavioral health 'prescription pad' developed by NCPTSD's 'Tech into Care Initiative' to support providers' integration of apps and online programs that support EBP homework completion, psychoeducation, and coping skills practice into care.

Looking ahead, the availability of large databases and machine learning techniques offer intriguing possibilities for developing effective interventions based on wellestablished risk and protective factors. With large computing power at their disposal, researchers can run sophisticated simulations to evaluate the impact of various intervention techniques, alone or in combination.



Lindsey Zimmerman, PhD, Investigator, Dissemination and Training Division

Improving Systems to Identify and Manage Suicidality

A major challenge to managing suicide risk is ensuring that the insights and techniques learned from research are implemented in routine care, and that VA health care facilities are set up in the best way to ensure that Veterans get the help they need. According to Dr. Lindsey Zimmerman of the National Center's Dissemination and Training Division, "Many clinicians say system factors are what get in the way of getting patients timely access to VA's highest quality care—things like how appointments are scheduled and how each clinician operates in the multidisciplinary mix of the team."

Dr. Zimmerman has been studying clinic organizational systems using participatory system dynamics, an approach to understanding and managing the many variables that affect how the health care system is able to deliver care. She and her colleagues have developed a program called Modeling to Learn, which allows frontline staff to simulate how changes in their procedures and protocols can meet

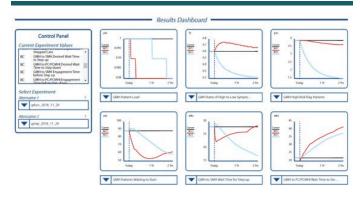


specific clinic goals. This method can identify approaches to improvement on a "hyper-local" basis—that is, ensuring that local staff are deeply involved in the process and that actions optimize the ability of local staff to better respond to the needs of Veteran patients from their own community. Dr. Zimmerman notes, "Sometimes clinics can find improvements they didn't know were there."

"Rather than the costly approach of trial-and-error learning, we encourage clinics to 'test, don't guess.' For example, some changes in a complex system may be higher payoff actions, where a small change can create a big effect." Dr. Zimmerman believes that testing and simulation can be extremely valuable. "Mistakes are costly, in terms of money, staff time, and patient suffering. The costs are so high we don't want to just guess! We want to use the best evidence possible regarding whether a particular change will work to improve local care quality."

Simulation provides immediate feedback on the shortand long-term impact of proposed changes on both patients and staff. For example, a long waiting list for appointments can be a problem for suicide prevention, because individuals in crisis need to have immediate access to care. However, there are many tradeoffs to consider in addressing these acute patient needs, including the possible impact of changes in scheduling procedures on the care of existing patients. Modeling to Learn helps teams improve the care patients receive over time, from their initial wait for services to completing a therapeutic course of treatment.

To address suicide prevention specifically, Dr. Zimmerman and her team released a new module for Modeling to Learn in 2018 that helps teams examine the effects of using standardized symptom scales, or measurement-



The Modeling to Learn Results Dashboard compares three quality improvement experiments on the VA mental health continuum of care, including the impact on patients at high risk for suicide.



Kelly Maieritsch, PhD and Nancy Bernardy, PhD, Co-Directors of the PTSD Mentoring Program in FY 2018

based care, to more efficiently identify when Veterans are improving or getting worse. Clinicians can step some patients up to higher levels of care when necessary; or they can move patients who are doing better to lower levels of care, thereby freeing providers' time to accommodate new patients.

In addition to systems-level changes, the National Center disseminates information about best practices directly to clinicians and clinic leaders through the PTSD Consultation and Mentoring Programs. The PTSD Consultation Program provides guidance on working with individuals with PTSD, including those who are at risk for suicide. The PTSD Mentoring Program promotes best practices in the clinical and administrative components of specialty care, including advancement in suicide risk assessment and prevention, through an extensive network of PTSD program directors. In 2018 the Mentoring Program sponsored a conference that focused on improving strategies for recognizing suicide risk and coordinating suicide prevention care in PTSD programs. The meeting was highly successful at achieving targeted outcomes, and 97% of participants agreed that their attendance helped them meet VHA strategic objectives. Six months later, 95% of participants had met with local REACH-VET Coordinators to outline plans for coordination of care and identification of high-risk Veterans, EBP template increased 12%, and nearly half of programs piloted a template that used measurement-based care to share clinical data with Veterans to show their progress or the need to change treatment course.

Looking to the Future

According to Executive Director Dr. Paula Schnurr, there are several key priorities for the National Center's work on PTSD and suicide over the next few years.

- Establish a clearer understanding of the relationship between PTSD and suicide, both directly and in terms of how PTSD relates to other risk factors. The ability to predict suicidality with greater certainty will lead to more successful prevention.
- Further explore whether the treatments and technologies that are effective for PTSD can also reduce suicidality. The National Center has significant experience with evidence-based treatments (EBTs) for PTSD, and there is evidence that these treatments reduce suicidal ideation, but better data are needed to determine whether these treatments reduce risk for all suicidal behaviors.
- Support the initiatives undertaken by VA nationally to provide seamless, proactive mental health support, work closely with public health agencies, and develop comprehensive data sources.

The National Center has a critical role to play in advancing the field's understanding of how trauma and PTSD relate to suicide. The geographic reach and multidisciplinary nature of the National Center staff give the Center a unique ability to access many sources of data, examine

The connection between researchers and clinicians that is fundamental to the National Center's structure gives investigators a unique ability to incorporate lessons from the field into their research.

the interrelationship of many variables, and establish partnerships with other agencies throughout government, academia, and the health care community.

Moreover, the connection between researchers and clinicians that is fundamental to the National Center's structure gives investigators a unique ability to incorporate lessons from the field into their research—and creates pathways for bringing the most up-to-date best practices to the field, where they can have a positive impact on the lives of Veterans.

Expanding Understanding of PTSD: Major Research Initiatives in FY 2018

For nearly 30 years, the National Center for PTSD has been in the forefront of research aimed at understanding and treating PTSD. During FY 2018, researchers at the National Center led 134 funded studies—ranging from investigations at a single location to projects across multiple sites—including studies undertaken in collaboration with partner organizations in the government, academic institutions, and agencies outside the United States. Investigators published 233 peerreviewed journal articles, book chapters, and books, and prepared an additional 117 in-press and advance online publications.

The National Center continues to support cutting-edge clinical trials and biological studies via the CAP, a sevenyear, \$42 million award to the National Center and the South Texas Research Organizational Network Guiding Studies on Trauma and Resilience (STRONG STAR) Consortium at the University of Texas Health Science Center. CAP is now in its fifth year, with 11 studies currently underway. Another large project, a multi-site CSP study to examine three commonly prescribed medications for PTSD-related insomnia (trazodone, eszopiclone, and gabapentin), got underway in FY 2018. A new major initiative launched in FY 2018 is the Longitudinal Investigation of Gender, Health, and Trauma (LIGHT) study. Investigators will examine the influence of community violence on the longitudinal course of PTSD and health outcomes, including reproductive health in women Veterans.

The National Center's research activities are driven by six operational priorities. The first five priorities, established in 2013, are Biomarkers, Treatment, Care Delivery, Implementation, and initiatives aimed at updating the *Diagnostic and Statistical Manual of Mental Disorders–Fifth Edition (DSM-5)*. A sixth priority—PTSD and Suicide—was added in FY 2017. The following sections highlight some of the research initiatives undertaken during FY 2018 to address these six operational priorities. (Appendix A contains a comprehensive listing of research projects that took place at each of the National Center's seven Divisions.)

Biomarkers

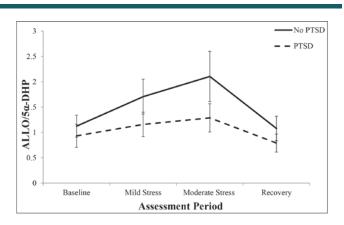
The National Center is dedicated to research aimed at identifying measurable biological factors that inform



the diagnosis, assessment, prevention, and treatment of PTSD. Biomarker identification may lend insight into early detection of at-risk individuals and enable the development of personalized or new therapeutic approaches for PTSD. This work benefits from collaborations between National Center investigators and several other organizations, including the <u>Translational</u> <u>Research Center for Traumatic Brain Injury and Stress</u> <u>Disorders (TRACTS)</u>, the Psychiatric Genomics Consortium (PGC), the PTSD Working Group of the ENIGMA (Enhancing Neuroimaging Genetics through Meta-Analysis) Consortium, the Million Veteran Program (<u>MVP</u>), and the Army STARRS consortium.

VA's National PTSD Brain Bank, established in 2014, continues to expand under the direction of Dr. Matthew Friedman, Senior Advisor to the National Center. This is the only brain bank in the world devoted specifically to studying the biological bases of PTSD, and currently has an inventory of over 300 PTSD and comparison brains.

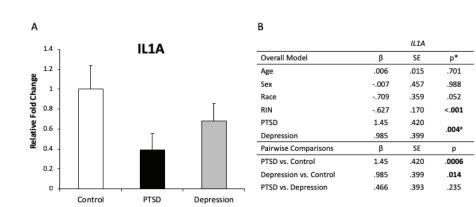
In FY 2018, investigators in the Clinical Neurosciences Division made advances in the areas of genetics, neuroinflammation, neuroendocrinology, and brain imaging. Molecular and genetic studies utilized tissue gathered from the PTSD Brain Bank to show that PTSD is associated with increased inflammatory signaling, as well as cell adhesion and cell proliferation in brain regions associated with PTSD. Recently published work demonstrated that women with PTSD are at heightened risk for decreased conversion of progesterone into its anxiety-reducing metabolites, which has implications for innovative treatments that target these hormones.



Allopregnanolone and pregnanolone (ALLO) are neuroactive steroids that positively and potently modulate inhibitory GABAa receptors in the brain, resulting in anti-anxiety and other behavioral effects. This figure shows that the ratio of ALLO to its precursor, 5α -DHP, has a blunted response to stress in women with PTSD compared to women without PTSD. (Figure 3 in article.)

Pineles, S. L., Nillni, Y. I., Pinna, G., Irvine, J., Webb, A., Hall, K. A., ... & Rasmusson, A. M. (2018). PTSD in women is associated with a block in conversion of progesterone to the GABAergic neurosteroids allopregnanolone and pregnanolone measured in plasma. *Psychoneuroendocrinology, 93*, 133-141. Doi: <u>10.1016/j.</u> <u>psyneuen.2018.04.024</u>

Other ongoing work is combining brain imaging with novel pharmacological manipulation, including guanfacine, a medication that lowers activity of the sympathetic nervous system and is used to treat high blood pressure and attention-deficit hyperactivity disorder, and perampanel, an antiepileptic drug that targets glutamate receptors. These studies will help investigators better understand how altering specific neurotransmitter systems can change regional brain activity and affect trauma and mood symptoms.



Expression of the gene for IL1A, an important inflammatory cytokine, is lower in the dorsolateral prefrontal cortex of patients with PTSD and depression compared to controls. Panel A shows the relative fold change between the groups, while panel B shows the statistical model used [statistically significant findings (p < 0.05) are highlighted in bold]. (Figure 1 in article.)

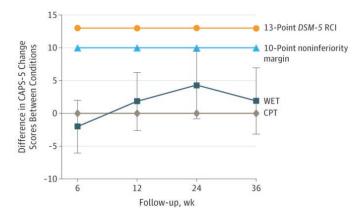
Morrison, F. G., Miller, M. W., Wolf, E. J., Logue, M. W., Maniates, H., Kwasnik, D., ... & Aytan, N. (2019). Reduced interleukin 1A gene expression in the dorsolateral prefrontal cortex of individuals with PTSD and depression. Neuroscience Letters, 692, 204-209. Doi: 10.1016/j.neulet.2018.10.027

Treatment Engagement, Efficiency, and Effectiveness

The National Center has long been a leader in the development and evaluation of EBTs for PTSD. One of the most ambitious efforts in treatment research is CSP #591, an investigation of PE and CPT at 17 VA facilities across the country. The investigators completed enrollment of 916 participants in FY 2018, and results are expected to be available in FY 2019.

Increasing engagement in evidence-based psychotherapies (EBPs), delivering effective care more efficiently, and reducing dropout from PTSD treatments continue to be goals of the National Center. A prime example of an efficient treatment recently developed by National Center investigators is Written Exposure Therapy (WET), a five-session exposure-based treatment for PTSD that has shown strong effects with non-Veteran patients. A high-profile study published in FY 2018 demonstrated that this brief intervention was as effective as CPT, had a lower rate of dropout, and could be implemented successfully with Veterans.

In collaboration with STRONG STAR, researchers are testing the efficacy of two alternative delivery protocols for CPT: a variable-length protocol, in which treatment length is based on patient progress, and delivery in an intensive outpatient format with active-duty military



Noninferiority margins and 95% confidence intervals for Clinician-Administered PTSD Scale for DSM-5 (CAPS-5) scores. The vertical axis represents differences between the CPT and WET conditions in CAPS-5 total score changes; negative values indicate greater improvement in the WET condition. RCI = reliable change index. (Figure 2 in article.)

Sloan, D. M., Marx, B. P., Lee, D. J., & Resick, P. A. (2018). A brief exposure-based treatment vs cognitive processing therapy for posttraumatic stress disorder: A randomized noninferiority clinical trial. *JAMA Psychiatry*, *75*, 233-239. <u>doi:10.1001/jamapsychiatry.2017.4249</u>

Servicemembers. Center investigators are also exploring novel treatment approaches that have mechanisms of action different from existing PTSD treatments,

including ketamine, neurofeedback, and ketamine-enhanced PE.

Investigators in the Dissemination and Training Division are examining patient characteristics that are associated with effective engagement in care and risk for subsequent mental health problems; A prime example of an efficient treatment recently developed by National Center investigators is Written Exposure Therapy, a fivesession exposurebased treatment for PTSD.

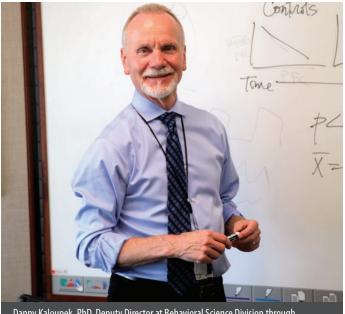
the latter is intended to facilitate provision of resources tailored to specific Veteran needs as a mechanism for increasing engagement in care. A new trial is examining the impact of <u>AboutFace</u>, a public awareness campaign to help Veterans recognize PTSD and motivate them to seek treatment, on engagement with EBTs.

Care Delivery, Models of Care, and System Factors

Improving access to PTSD treatments in many settings, including in the home, and across periods of transition, is an important goal of the National Center's research activities. To this end, investigators are examining service use and the delivery of care using technologies such as telehealth, web-based interventions, and mobile apps.

The Veterans Metric Initiative (TVMI) is a large-scale longitudinal study that is looking at newly separated Servicemembers' reintegration experiences. Data from this study revealed that female Veterans within the first year of separation had a greater likelihood of experiencing mental health concerns and seeking health care. Ongoing work is examining the relationship between Veterans' functioning and their service use; findings suggest that functional impairments may increase the likelihood that women seek treatment, but may have the opposite effect for men.

Several ongoing studies are assessing the benefits of webbased technologies and mobile apps to increase Veterans' access to mental health care and to enhance outcomes. Specific examples include a web version of PE (Web-PE) delivered to military personnel and Veterans. Researchers



Danny Kaloupek, PhD, Deputy Director at Behavioral Science Division through October, 2018

are also comparing the effectiveness of PTSD Coach, a mobile app designed to help individuals with PTSD learn about and self-manage their symptoms, with traditional treatment for reducing PTSD symptoms in Veterans utilizing primary care services.

National Center investigators are developing strategies and tools that can be used in clinical settings to improve access to care. One project, conducted by the Behavioral Science Division, found that strategic changes in clinic intake procedures, such as distributing materials describing treatment options and adding a second intake session focused on collaborative treatment-planning, were associated with increased rates of retention in EBPs for PTSD.



Modeling to Learn facilitated simulation-based learning for improving team decision-making.

Investigators in the Dissemination and Training Division continue to use participatory systems dynamics modeling to compare the likely outcomes of potential solutions to access problems and then to select an optimal solution to implement. Preliminary data indicate substantially reduced wait times for treatment enrollment at facilities using this method, compared to those using routine enrollment strategies.

Implementation

A key objective of the National Center is to ensure that best practices are being implemented throughout the health care system. Investigators are involved in the implementation of evidence-based screening and treatment across VA, including ongoing assessment of the rate at which PE and CPT are gaining acceptance and usage and investigation of the effectiveness of different training models on trainee delivery of PE.

During FY 2018, Executive Division investigators examined the use of EBP and antidepressants (fluoxetine, sertraline, paroxetine, and venlafaxine) in VA over a 10-year period. A steady increase in the use of PE and CPT was seen over this time, but there was little change in the use of antidepressants. Other implementation research efforts include expansion and evaluation of the web-based version of Skills Training in Affective and Interpersonal Regulation (STAIR) entitled webSTAIR. webSTAIR is a free online site that guides users through a range of tools designed to enhance communication skills, improve emotion regulation, and address interpersonal relationship problems. Nine health care systems now have webSTAIR Champions, who are delivering varying levels of coaching alongside Veterans' use of the site.

Researchers are looking at ways to increase the use of EBPs for PTSD and associated problems across treatment settings. One study is testing a facilitated implementation toolkit to increase use of EBPs in VA PTSD clinics. Another is testing whether a tailored set of implementation strategies increases the use of PE within the military health system. National Center investigators continue to disseminate an intervention shown to reduce or prevent aggression within trauma-exposed military and Veteran families across VA, with expansion to a military installation and an underserved urban civilian setting. In FY 2018, the investigators demonstrated that training and implementation were successful overall and identified potentially addressable barriers to implementation.

DSM-5

The *DSM-5* is an established classification and diagnostic tool that specifies the diagnostic criteria for all currently recognized psychological disorders. During FY 2018, the National Center continued to update PTSD assessments for the *DSM-5* and explore the utility of the *DSM-5* PTSD criteria.

An ongoing project by Behavioral Science and the Executive Division aims to validate a <u>Primary Care Screen</u> for PTSD for DSM-5 (PC-PTSD-5) cutoff score by comparing it to the Clinician-Administered PTSD Scale for DSM-5 (CAPS-5), which is the recognized diagnostic interview for PTSD. The PC-PTSD-5 is currently used across VA for mandatory PTSD screening. Other projects aim to validate the CAPS-5 in a military population; validation with a VA sample has already been completed.

Investigators in the Clinical Neurosciences Division have been working to establish the prevalence of PTSD based on *DSM-5* criteria. One study revealed lifetime and pastmonth PTSD prevalence rates among Veterans of 8.1% and 4.7%, respectively. Another project compared the prevalence of PTSD according to criteria from the *DSM-5* and the International Classification of Diseases 11th Revision (ICD-11), showing the prevalence was higher using *DSM-5* criteria.

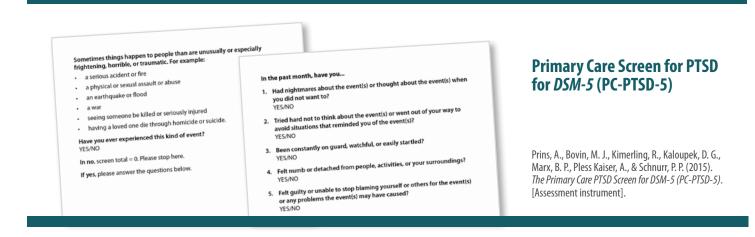
PTSD and Suicide

This developing portfolio aims to explain the relationship between PTSD and suicide, and to develop strategies to prevent suicide among Veterans with PTSD. A summary of work in this area during FY 2018 is highlighted in the introductory section of this Annual Report: Understanding the Relationship Between PTSD and Suicide: Challenge and Opportunities.

In addition to the specific initiatives discussed in the introduction, other important studies are underway. Behavioral Science Division investigators are using machine learning to identify interactions among risk factors that predict future suicide attempts (PTSD diagnosis, traumatic brain injury, prior suicide attempts, and others) among Veterans enrolled in Project VALOR; they are also exploring how these interactions may differ for men and women.

Clinical Neurosciences Division investigators have utilized data from the National Health and Resilience in Veterans Study (NHRVS) study to identify risk factors for suicidal ideation and suicide attempts in combat Veterans, including PTSD, moral injury, loneliness, alcohol use disorder, and denial-based coping. Investigators are also examining whether metabotropic glutamate receptor type 5 (mGluR5), which is involved in fear learning and emotion regulation, is a biomarker for suicidal ideation in individuals with PTSD, and potentially a new treatment target.

Executive Division researchers continue to advance suicide prevention work through collaborations with the National Center for Patient Safety (NCPS), the Office of Mental Health and Suicide Prevention (OMHSP), and the Center of Excellence for Prevention of Suicide (COE). An ongoing collaboration with OMHSP validated a prior finding of high-risk periods for suicide following psychiatric discharge. Other ongoing work is using analysis of clinical note text in a VA PTSD treatment setting to evaluate problems in the patient-therapist relationship that precede death by suicide.





Honors and Awards Received by National Center Staff in FY 2018

Teddy Akiki, MD

Clinical Neurosciences Division

New Investigator Award, American Society of Clinical Psychopharmacology

New Investigator Award, International Society for CNS Clinical Trials and Methodology

Team Award including: Katherine Juhasz, MS; Shannon McCaslin, PhD; Jason Owen, PhD; Jeremy Tevis, BFA

Dissemination and Training Division Executive Division

Audience Choice Award at the VISN 1 Improvement + Innovation Summit for Cards for Connection

Terry Keane, PhD

Behavioral Science Division

Presidential Award for Outstanding Contributions to the Field of Trauma Psychology, American Psychological Association

Rachel Kimerling, PhD

Dissemination and Training Division

Division 56 Poster Award, American Psychological Association

Andrea Neitzer, MS, CCRC

Dissemination and Training Division

Poster Competition Award for "Targeted Strategies to Accelerate Evidence-Based Psychotherapy Implementation in Military Settings" (PIs Rosen & McLean), Traumatic Brain Injury Research Forum

Suzanne Pineles, PhD

Women's Health Sciences Division

Nga B. Pham Memorial Award for Excellence in Clinical Psychology Training, VA Boston Healthcare System Psychology Service

Ann Rasmusson, PhD

Women's Health Sciences Division

Henry L. Bolley Academic Achievement Award, North Dakota State University

Jillian Shipherd, PhD

Women's Health Sciences Division

Gay and Lesbian Medical Association Achievement Award: Health Professionals Advancing LGBT Equality

Quyen Tiet, PhD

Dissemination and Training Division

American Psychological Association Division 12 Fellow

Shannon Wiltsey Stirman, PhD

Dissemination and Training Division

Mid-Career Innovator Award, Association for Behavioral and Cognitive Therapies

Stanford Department of Psychiatry and Behavioral Sciences Chairman's Polymath Award

Fellowships and Travel Awards

Filomene Morrison, PhD

Behavioral Science Division

Travel Award, Society for Biological Psychiatry

Alies Muskin Career Development Leadership Program, Anxiety and Depression Association of America

Lynnette Averill, PhD Clinical Neurosciences Division

Alies Muskin Career Development Leadership Program, Anxiety and Depression Association of America

Lauren Sippel, PhD Executive Division

Alies Muskin Career Development Leadership Program, Anxiety and Depression Association of America

Johanna Thompson-Hollands, PhD

Behavioral Science Division

Alies Muskin Career Development Leadership Program, Anxiety and Depression Association of America

Promoting PTSD Education: Training, Dissemination, and Communication

A major focus of the National Center is to ensure that the results of research on PTSD are disseminated to clinicians, other professionals, Veterans and their families, and the public, so that the best and most current practices can be used to help the most people. National Center professionals can take advantage of the geographic reach, connection to VA and other health care systems, and network of collaborating organizations to deploy innovative strategies for educating professionals and the public on trauma and PTSD.

Education efforts include a range of offerings—courses, brochures, videos, online resources, literature databases, and more—that incorporate the most up-to-date knowledge gained from research. In the National Center's early days, dissemination and training took place through traditional publications and face-to-face meetings. Over the years, communication has advanced to incorporate web-based programs, telehealth approaches, mobile apps, and other new technologies as they become available.

The sections that follow highlight some of the initiatives aimed at promoting general PTSD awareness, support for providers, self-help tools, and resources for professionals during FY 2018, plus a description of some of the National Center's online resources.

PTSD Awareness

Positive social support is an important factor in recovery from PTSD, and family and friends are an important source of that support. During FY 2018, the National Center developed <u>Understanding PTSD: A Guide for Family and</u> <u>Friends</u> (PDF), a follow-up to <u>Understanding PTSD and</u> <u>PTSD Treatment</u> (PDF), which was published in 2016. This full-color brochure is aimed at strengthening readers' ability to help their loved ones cope with PTSD, seek



Understanding PTSD: A Guide for Family and Friends is available in English and Spanish.

help, and successfully complete treatment. The brochure provides clear information on the causes of PTSD and effective EBTs. A Spanish-language version, <u>Entendiendo</u> <u>el TEPT: Guía para Familiares y Amigos</u> (PDF), was released in FY 2018, adding to the Center's growing number of <u>resources in Spanish</u>. A third title in the series, focusing on PTSD and aging, is slated for release next year.

The guide also emphasizes the need for family and friends to take care of their own mental health needs, and to this end it draws on stories included in <u>AboutFace</u>, the online gallery of videos featuring Veterans, family members, and clinicians talking about PTSD and the value of treatment. The stories shed light on the challenges faced by the Veterans' loved ones, while also highlighting their strengths and the strategies they use to promote communication and healing. <u>AboutFace</u> has recently been expanded to include longer videos called PTSD case studies. These features weave the voices of family members and clinicians into Veterans' accounts of their journeys through PTSD treatment.



While many of the National Center's resources are released only after months of planning, every year also includes some efforts requiring a more rapid response. During FY 2018, the National Center responded to several devastating crises faced by the country, all within a few months: wildfires in California; hurricanes in Puerto Rico, Florida, and Texas; and a mass shooting in Las Vegas. The National Center quickly crafted online articles to help survivors and clinicians understand the psychological consequences of these events and how to address them.

Support for Providers in the Field

Since 2011, the PTSD Consultation Program has been supporting VA providers with consultation from expert PTSD clinicians, administrators, and researchers. Because many Veterans receive their care outside VA, in 2015 the National Center began offering these services to community providers who treat Veterans with PTSD. Whether via phone or email, consultations are free, timely, and focus on EBTs.

Consultants support providers by offering information and resources about assessment, diagnosis, psychotherapy, and medications, and on ways to collaborate with VA on the care of Veterans. The program also offers a monthly webinar with free continuing education (CE) credit. There were 2,222 consultations in FY 2018, about onefourth of which came from providers treating Veterans in community settings. PTSD Consultation Program leaders have also provided support and advice related to launching and expanding VA's Suicide Risk Management Consultation Program, and consultants from these two programs frequently collaborate on cases that involve both PTSD and suicidality.

In the wake of the devastating natural disasters and mass violence events that took place in the past year, the PTSD Consultation Program received clearance to offer its services to community providers who had questions about the care of anyone—Veteran or civilian—who was affected by these tragedies. In March of 2018, when a fatal shooting occurred in Yountville, CA at a residential treatment program for Veterans, the National Center again responded, first with online resources for survivors and employers, and later with two national webinars for mental health providers on coping in the aftermath of incidents of workplace violence.

The VA PTSD Mentoring Program, launched in 2008, promotes best practices in the clinical and administrative components of specialty care. The program is a network of PTSD program directors who collaborate at both the regional Veterans Integrated Services Network (VISN) and national level. This year, a face-to-face meeting of all clinic directors took place, focused on increasing the reach of evidence-based practices and improving strategies to recognize risks and coordinate suicide prevention care. The Mentoring Program led a process improvement project with the Northeast Program Evaluation Center (NEPEC) to increase data collection and validation efforts for mandatory program reporting. The program also provided direct support to PTSD clinics through site visits and other facilitation strategies.



Sonya Norman, PhD, Director, PTSD Consultation Program

The Executive Division, with support from the VA Office of Rural Health, continued an educational outreach program in VISN 1 that uses academic detailing and facilitation to improve the treatment of rural Veterans. The program's overarching goal is to ensure that Veterans with PTSD who live in rural areas not convenient to a specialized VA facility can receive evidence-based PTSD treatment. With contributions from experts throughout VA, the program developed an online toolkit to help providers in rural clinics understand the nature of effective PTSD care in their communities. The toolkit will be available in FY 2019. On the patient side, the program is using a direct-toconsumer outreach effort to encourage Veterans to play an active role in their own PTSD care.

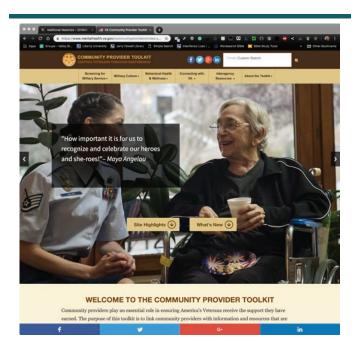
The Practice-Based Implementation (PBI) Network is a group of VA PTSD field sites and individual clinicians who are collaborating with the National Center to test new approaches to implementation. During FY 2018, the Network completed a pilot test of a learning collaborative to train and support clinicians as they integrate mobile and internet technologies into their practices. The initiative includes both providers and experts in mobile apps and online programs. The Network also developed a variety of resources this year, including a video series, handouts for providers and Veterans, and implementation materials.



The Practice-Based Implementation Network collaborates with the National Center to test new approaches to implementation.

The PTSD Clinician's Exchange, the National Center's practitioner registry, continues to link participating treatment providers in VA, DoD, and the community with practical training and resources related to 25 best practices. The Exchange is being combined with training programs from another initiative called Project Outfit. This will create an online portal with a content management system that will allow rapid updates to align with new evidence and changes in clinical practice guidelines.

VA's <u>Community Provider Toolkit</u> strengthens partnerships between VA and clinicians in local communities by providing key information and resources that support culturally competent and evidence-informed clinical



The Community Provider Toolkit has information and resources to support evidenceinformed clinical practice.

practice. The online toolkit has been visited over 200,000 times since it was developed in April 2013. During FY 2018, it was enhanced by the addition of a new section focusing on rural Native American Veterans, developed in partnership with the Office of Rural Health. Based on user feedback, the toolkit is currently being redesigned with enhancements focused on the Military Screening and Culture and Crisis Management (including Suicide Prevention) sections.

Clinicians, researchers, and forensic examiners rely on assessment instruments developed by the National Center, which are available for free to qualified research and clinical professionals. This year, responding to a need on the part of many assessment requestors, several key assessments were made into fillable forms. The CAPS-5, Life Events Checklist for *DSM-5* (LEC-5) and PTSD Checklist for *DSM-5* (PCL-5) can now all be completed entirely electronically. In the case of the CAPS-5, the assessment calculates the interviewee's score, thus saving time and reducing the potential for errors by assessors.

Self-Help and Treatment Companion Resources

The National Center is undertaking an ambitious effort to enhance <u>VetChange</u>, a website for Veterans who are concerned about their drinking and PTSD symptoms.



Aware is a new mobile app that allows users to track their mood.

Behavioral Science Division investigators, along with colleagues at VA Boston Healthcare System and Boston University, created a provider-facilitated version of the program. The reworked VetChange will allow providers to assign specific modules to their patients and track their progress toward abstinence or drinking reduction goals. Initially, this version of VetChange will be pilot tested as part of a research project, with the eventual aim of deploying it across the VA system.

AWARE

The Dissemination and Training Division has continued its pioneering work in development of mobile apps with the release of Aware, an app that allows users to track mood and related variables through their smartphones; the app is providing data for a <u>research study</u> that is currently underway. This year also saw the release of redesigned versions of three additional apps: Mindfulness Coach, PE Coach, and PTSD Family Coach. Research versions of two apps that target sleep problems, Insomnia Coach and CBT-I Coach (for use with Cognitive Behavioral



Mobile apps developed by the National Center for PTSD.

Therapy for Insomnia), were created as well; these apps are being tested in a research context to determine their effectiveness. In all, the National Center has released and maintained 16 mobile apps since the launch of the awardwinning <u>PTSD Coach</u> in 2011, all available for free to users worldwide.

Beyond MST, a military sexual trauma (MST) recovery app, is under development by a team of investigators from the Women's Health Sciences and Dissemination & Training Divisions. This mobile app focuses on promoting recovery from experiences of sexual harassment and/or sexual assault experienced during military service. While it is not intended to be a replacement for mental health care, it can be used independently or in conjunction with psychotherapy and is appropriate for both male and female survivors of MST.



Cards for Connection is an easy-to-access deck of playing cards for homeless Veterans. Each of the 52 cards has a unique design, and in using them to play card games, Veterans will have repeated exposure to simple coping skills and information about accessing critical VA resources. A prototype was distributed this year, and the set will be refined based on feedback from early users. The cards won the Audience Choice Award at the VISN 1 Improvement and Innovation Summit in 2018.

<u>Two online courses</u> designed to help family members cope with PTSD and related problems were launched this year, one intended to help family members cope more effectively with a Veteran's PTSD symptoms and the other focusing on addiction. These courses, adaptations of CRAFT (Community Reinforcement and Family Training),



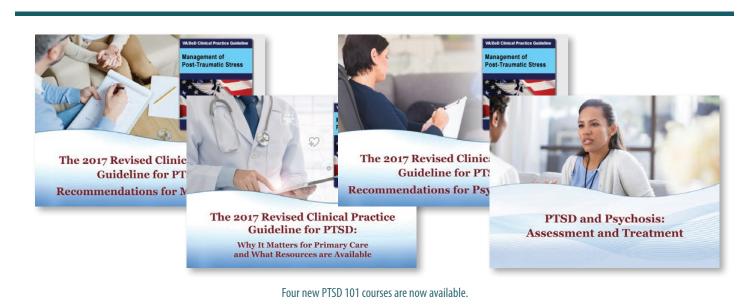
are intended to build understanding and help family members encourage their loved one to enter treatment.

Investigators at the Women's Health Sciences Division continue to expand the reach of WoVeN: The Women Veterans Network, a network that fosters personal connections, improves well-being, and provides information to support women's readjustment. This year, WoVeN held a retreat that trained an additional cohort of women Veteran peer leaders. WoVeN now has support groups in 10 cities across the country and offers women Veterans a <u>website</u> where they can connect with each other and access resources on topics including PTSD and MST. In collaboration with the DoD, National Center experts have created RESET for Active Duty Army personnel, a onehour video training with associated audio files designed to help Soldiers cope with intrusive thoughts following deployment. This data-supported resilience training will be made available to Soldiers through the online learning management system the Army has in place, and it is hoped that in the future it will be adapted for use by any branch of the military.

Educational Resources for Professionals

This year, the National Center developed four new offerings in the PTSD 101 series, including courses covering PTSD and psychosis and the 2017 VA/DoD Clinical Practice Guideline for PTSD recommendations about psychotherapy and medications. PTSD 101 courses, like most of the CE courses that the National Center produces, provide free CE credits to providers nationwide. Available through the website and through TRAIN (Training Finder Real-time Affiliate Integrated Network), PTSD 101 courses give clinicians, researchers, and trainees 24/7 access to expert instruction in PTSD treatment.

In September 2018, the Women's Health Sciences Division hosted a summit entitled Women Veterans, Traumatic Stress and Post-Military Health: Building Partnerships for Innovation. Researchers, clinicians, policy makers, funders, Veterans, and other stakeholders came together to engage in a series of conversations. Key goals of the summit were





Panel presentation at the Women's Health Science Division's summit focused on women Veterans.

to showcase innovative women Veterans' health research and to foster collaborations in the service of enriching the care of women Veterans.

National Center investigators partnered with the VA Psychology Training Council to create an online learning module on the Unified Protocol (UP), a therapeutic approach with relevance to a range of psychiatric disorders. The goal of the module is to provide information for clinicians who are familiar with UP and interested in training other staff who may want to use the treatment.

Online Communication Resources

A major transformation of the National Center's website, which is the public face of the organization, will be launched in early FY 2019. Planning, organization, and development of the new site began with a research effort in 2016 that involved interviews and focus groups, and the site was subjected to a robust content and usability audit. A team of Executive Division staff and contractors then built a site that will provide a more rewarding experience for both new visitors and long-time site users.

The new site was built using a "mobile-first" framework, in recognition of the growing number of users who access the internet solely through their smartphones. The site has also integrated more imagery and video, giving visitors immediate access to multimedia assets. Articles use an approach that allows visitors the option of getting a quick overview of the topic at hand or drilling down for more detailed information. A new "you might also be interested in" feature directs users to related site content they might otherwise have missed. The National Center continues to make creative use of podcasts, Facebook Live videos, and other social media channels. Two podcasts produced through a partnership with the Defense Health Agency featured National Center investigators discussing PTSD and available resources. The National Center has also disseminated PTSD awareness materials at national and local events, such as National Alliance on Mental Illness and National Foundation for Suicide Prevention walks, Pride parades, and Valor Games for disabled Veterans.

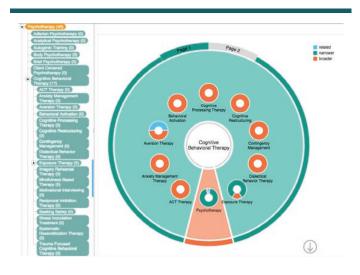
Since 1989, the PILOTS database has been providing free, online access to an international, cross-disciplinary collection of journal articles, reports, books, and dissertations on psychological trauma and its consequences. PILOTS offers a custom thesaurus focused on PTSD and trauma, as well as a thorough listing of psychological tests and measures, to help searchers



In FY 2018, the National Center for PTSD launched a redesigned website that was informed by Veteran and provider research.

efficiently and precisely navigate the abundant scholarly literature related to PTSD. At the end of the fiscal year, the database contained more than 61,000 items, and users ran more than 45 million searches during the year.

During FY 2018, Resource Center staff worked with a consultant to develop a custom content management system. The new system will streamline the processing

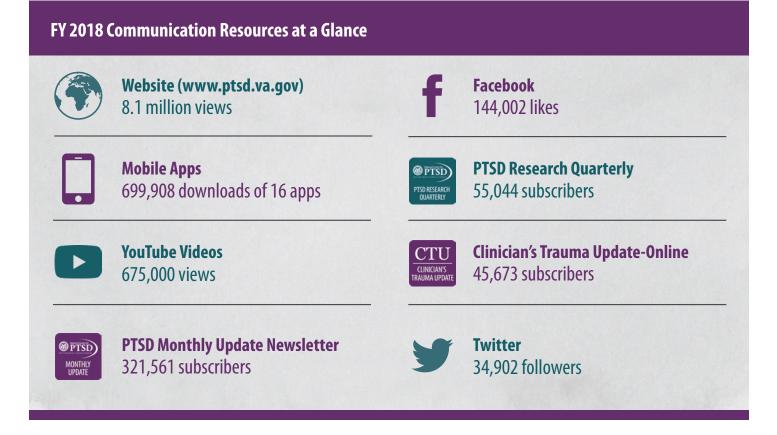


Semantic visualization of CBT subject terms used in PTSDpubs.



The PILOTS database was rebranded as PTSDpubs in FY 2018.

of records, enrich them with additional metadata, and enhance the public search capabilities of the database. The inclusion of cutting-edge semantic software with auto-tagging capabilities should accelerate the pace at which new records are added to the database, leading to a more up-to-date and comprehensive collection. The enhanced search interface provides easy, seamless access to advanced options, minimizing the effort required to construct sophisticated searches. With the upcoming launch of the new system, PILOTS will be rebranded as <u>PTSDpubs</u> to better clarify for potential users the subject matter and content types included in the database.





About the National Center for PTSD



History

The National Center for PTSD was created in 1989 within VA in response to a Congressional mandate (PL 98-528) to address the needs of Veterans and other trauma survivors with PTSD. The National Center was developed with the ultimate purpose of improving the well-being, status, and understanding of Veterans in American society. The mandate called for a COE that would set the agenda for research and education on PTSD without direct responsibility for patient care. Convinced that no single VA site could adequately serve this unique mission, VA initially established the National Center as a consortium of five Divisions.

Organization

The National Center now consists of seven VA academic COEs across the United States, with headquarters in White River Junction, Vermont. Two Divisions are in Boston, Massachusetts; two in West Haven, Connecticut; one in Palo Alto, California; and one in Honolulu, Hawaii. Each contributes to the overall Center mission through specific areas of focus.

The National Center for PTSD is an integral and valued component of VA's OMHSP, which is within the Veterans Health Administration (VHA). OMHSP and the National Center receive budget support from VA, although the Center also leverages this support through successful competition for extramural research funding.



Leadership in Fiscal Year 2018



Paula P. Schnurr, PhD Executive Director, Executive Division, VT

Professor of Psychiatry, Geisel School of Medicine at Dartmouth



John H. Krystal, MD

Division Director Clinical Neurosciences Division, CT

Robert L. McNeil, Jr. Professor of Translational Research and Chairman of the Department of Psychiatry, Yale University School of Medicine



Matthew J. Friedman, MD, PhD Senior Advisor and Founding

Executive Director Executive Division, VT

Professor of Psychiatry and of Pharmacology and Toxicology, Geisel School of Medicine at Dartmouth



Josef I. Ruzek, PhD

Division Director (Oct-Apr) Dissemination and Training Division, CA

Professor (Clinical Professor-Affiliated), Stanford University; Associate Professor, Palo Alto University



Jessica L. Hamblen, PhD Deputy for Education Executive Division, VT

Associate Professor of Psychiatry, Geisel School of Medicine at Dartmouth



Craig S. Rosen, PhD

Deputy Director (Oct-Apr) Acting, Division Director (May-Sept) Dissemination and Training Division, CA

Associate Professor of Psychiatry and Behavioral Sciences, Stanford University School of Medicine



Paul E. Holtzheimer, MD Deputy for Research Executive Division, VT

Associate Professor of Psychiatry, Geisel School of Medicine at Dartmouth



Rani Hoff, PhD, MPH

Division Director Evaluation Division, CT

Director of the Northeast Program Evaluation Center, CT

Professor of Psychiatry, Yale University School of Medicine



Terence M. Keane, PhD Division Director Behavioral Science Division, MA

Professor of Psychiatry and Assistant Dean for Research, Boston University School of Medicine



Tara E. Galovski, PhD

Division Director Women's Health Sciences Division, MA

Associate Professor of Psychiatry, Boston University School of Medicine

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David S. Riggs, PhD

Center for Deployment Psychology, Uniformed Services University of the Health Sciences

Appendix A: Acronyms Used in Appendix B

11beta-HSD1 11beta-Hydroxysteroid

Dehydrogenase 1

AMPA

α-Amino-3-Hydroxy-5-Methyl-4-Isoxazolepropionic Acid

APOE Apolipoprotein E

Army STARRS Army Study to Assess Risk and Resilience in Servicemembers

AUD Alcohol Use Disorder

CAPS-5 Clinician-Administered PTSD Scale for *DSM-5*

CBT Cognitive-Behavioral Therapy

COE Center of Excellence

CPT Cognitive Processing Therapy

CSP Cooperative Studies Program

DoD Department of Defense

DSM-5 Diagnostic and Statistical Manual of Mental Disorders--Fifth Edition

EBA Evidence-Based Antidepressant **EBP** Evidence-Based Psychotherapy

EEG

Electroencephalogram

ENIGMA Enhancing Neuroimaging Genetics through Meta-Analysis

fMRI Functional Magnetic Resonance Imaging

FY Fiscal Year

ICD-11 International Classification of Diseases 11th Revision

IPV Intimate Partner Violence

LATR Later-Adulthood Trauma Reengagement

MBC Measurement-Based Care

mGluR5 Metabotropic Glutamate Receptor Type 5

MRI Magnetic Resonance Imaging

MST Military Sexual Trauma

MVP Million Veteran Program **nAChR** Nicotinic Acetylcholine Receptor

NCPS National Center for Patient Safety

NDHS Neurocognition Deployment Health Study

NEPEC Northeast Program Evaluation Center

NHRVS National Health and Resilience in Veterans Study

OMHSP Office of Mental Health and Suicide Prevention

PC-PTSD-5 Primary Care Screen for PTSD for DSM-5

PE Prolonged Exposure

PET Positron Emission Tomography

PGC Psychiatric Genomics Consortium

PTSD Posttraumatic Stress Disorder

RTP Residential Treatment Program **SERV** Survey of Returning Veterans

SGK1 Serum/Glucocorticoid Regulated Kinase 1

SSRI Selective Serotonin Reuptake Inhibitor

STAIR Skills Training in Affective and Interpersonal Regulation

STRONG STAR South Texas Research Organizational Network Guiding Studies on Trauma and Resilience

TBI Traumatic Brain Injury

TRACTS Translational Research Center for Traumatic Brain Injury and Stress Disorders

VA Department of Veterans Affairs

Project VALOR Veterans After-Discharge Longitudinal Registry

vmPFC Ventromedial Prefrontal Cortex

VHA Veterans Health Administration

WET Written Exposure Therapy

Appendix B: Fiscal Year 2018 Research Narrative

Behavioral Science Division

The Behavioral Science Division in Boston, Massachusetts, conducts research on life adjustment after military deployment, methods to assess trauma and posttraumatic stress disorder (PTSD), innovative approaches to clinical intervention and treatment delivery, and the potential neurobiological and genomic basis of PTSD and its comorbidities.

Biomarkers

The Division has an active portfolio of genetic and neuroimaging studies involving collaborations with investigators in the <u>Translational Research Center for Traumatic</u> <u>Brain Injury and Stress Disorders (TRACTS), the Department of</u> <u>Veterans Affairs (VA) National PTSD Brain Bank</u>, the Psychiatric Genomics Consortium (PGC), and the PTSD Working Group of the ENIGMA (Enhancing Neuroimaging Genetics through Meta-Analysis) Consortium. During FY 2018, Division investigators have focused on the role of inflammation and oxidative stress in the biology of PTSD, and on the role of PTSD in accelerated aging.

Ongoing studies that examine PTSD and blast-related traumatic brain injury (TBI) in Veterans of Iraq and Afghanistan war zones aim to clarify the relative contribution of mild TBI and psychiatric conditions to deficits in current functioning. They also address long-term negative consequences such as neurodegenerative disease. The biomarkers examined by Behavioral Science Division studies include brain features measured by neuroimaging, as well as specific genes, polygenic risk scores, and epigenetic indicators drawn from both blood and brain tissue. New work is examining bloodbased biomarkers associated with neuronal injury and inflammation.

During fiscal year (FY) 2018, Division investigators continued to use functional and structural magnetic resonance imaging (MRI) to identify neural circuitry involved in PTSD, particularly as related to memory suppression and emotion regulation.

PTSD and Suicide

Behavioral Science Division investigators are actively contributing to knowledge about PTSD and suicide, particularly in the domain of identifying risk factors for suicide. For one project, investigators are using machine learning to identify the interactions among risk factors which predict future suicide attempts using data from the Veterans After-Discharge Longitudinal Registry (Project VALOR), partitioned by gender. Specifically, risk factors assessed at baseline (e.g., PTSD diagnosis, TBI, prior suicide attempts) will be examined separately among male and female Veterans in predicting suicide attempts over the course of the 4.5 years of VALOR.

Another project aims to examine the degree to which risk factors vary in their association with future suicide attempts across demographically distinct groups. Mixture modeling was used to identify demographically homogenous groups using age, gender, race, household income, employment status, marital status, education level, and parental status. Investigators found five groups, across which there was great variability in the association between risk factors and future suicide attempts, thereby providing strong support for the idea that risk factors function very differently for different demographic groups. History of a prior suicide attempt emerged as the only significant predictor in all groups.

Treatment Efficiency, Effectiveness, and Engagement

Division investigators conduct pioneering research on treatments for PTSD, guided by the key aims of overcoming barriers to seeking care, reducing dropout, and increasing the efficiency of care delivery. One example is the internetbased treatment VetChange, which is designed for Irag and Afghanistan combat Veterans who report both risky use of alcohol and PTSD-related distress. The initial clinical trial produced evidence that VetChange was effective in reducing both drinking and PTSD symptoms. The research version of VetChange was subsequently modified to include a mobilefriendly public website. This version, which is applicable to Veterans of all eras, is now under evaluation. A mobile app that has key VetChange features was recently developed in conjunction with the Dissemination and Training Division and will soon begin a pilot test phase. In addition, a major extension of the VetChange web intervention is underway to directly integrate with clinical care delivered by VA providers and to evaluate its effectiveness in VA clinics.

Other Division efforts include developing and testing efficient, therapist-delivered interventions or treatment extenders, with the goals of finding approaches that require less professional

(Behavioral Science Division, continued)

staff time and that are easier for patients to complete. A prime example is Written Exposure Therapy (WET), a five-session exposure-based treatment for PTSD that previously showed strong effects with non-Veteran patients. A high-profile study that was published in 2018 demonstrated that this brief intervention is as effective as Cognitive Processing Therapy (CPT), has a lower rate of dropout than CPT, and can be implemented successfully with Veterans.

Research on factors that link PTSD with aggression toward intimate partners has led to the development and evaluation of interventions that reduce or prevent aggression within at-risk military and Veteran families. Positive clinical trials have been published and the interventions are being implemented across the VA health care system and on one military installation. A new pilot study also is testing one of these programs in an underserved urban civilian setting.

In the area of complementary interventions, a continuing five-year study is examining the impact of two 12-week group treatments on chronic pain in Gulf War Illness. Tai Chi, a mindbody exercise that has been associated with both physical and mental health benefits, is compared with a wellness promotion intervention that is based on an existing VA model of care entitled *Whole Health*.

Division investigators also are examining a developmental phenomenon termed later-adulthood trauma reengagement (LATR). It involves efforts by older combat Veterans to actively reengage with wartime memories with the aim of building coherence and finding meaning in past experience. It is theorized that the LATR process has potential to lead to either positive outcomes such as personal growth or negative outcomes such as increased PTSD symptoms. An ongoing study is examining the impact of a 10-week psychosocial discussion group for older combat Veterans who report experiences consistent with the LATR process.

Care Delivery, Models of Care, and System Factors

The main example of work related to this National Center priority is a project that examines how evidence-based psychotherapy (EBP) is delivered by clinicians affiliated with the VA Boston Healthcare System Outpatient PTSD Clinic. Initial findings indicate that strategic changes in clinic intake procedures, such as distributing materials describing treatment options and adding a second intake session focused on collaborative treatment-planning, were associated with increased rates of retention in EBPs for PTSD.

DSM-5

Data collection is nearly complete for a study designed to validate a cutoff score for PTSD status according to *Diagnostic* and Statistical Manual of Mental Disorders—Fifth Edition (DSM-5) criteria based on the most recent version of the <u>Primary</u> <u>Care Screen for PTSD for DSM-5 (PC-PTSD-5)</u>. The study is

part of a larger effort to validate *DSM-5* versions of measures that have been developed by National Center investigators. The ongoing project recruits Veterans from VA primary care locations and compares the screening measure to the gold-standard interview, the <u>Clinician-Administered PTSD Scale for</u> <u>DSM-5 (CAPS-5)</u>. The study also examines the extent to which the optimal PC-PTSD-5 cutoff score varies across subgroups of Veterans. A separate study co-lead by a Behavioral Science Division investigator aims to provide validation of CAPS-5 performance with a military population; validation with a VA sample was completed previously.

Other Important Research

Prospective cohort studies. Division researchers are working on two large prospective cohort studies that collect information from strategically selected Veteran and Servicemember groups over time. The first, <u>Project VALOR</u>, is working with a registry of 1,649 male and female combat Veterans who became users of VA services after 2002. The project collects data about health outcomes associated with PTSD, supplemented by clinical information from VA electronic medical records. Data collection for the fourth sampling wave is now complete, with 1,205 participants (73% of the initial cohort); examination of PTSD symptom trajectories and predictors of those trajectories are in process. The next phase of the project involves collecting saliva samples from participants for future genomic analyses.

The second large investigation, the Neurocognition

Deployment Health Study (NDHS), began data collection at the outset of the Iraq War in 2003. Military personnel were assessed before deployment and at several intervals afterward—making it the first prospective, longitudinal study to address the psychological impact of war zone stress. The study design allows examination of long-term emotional and neuropsychological outcomes, as well as health-related quality of life and occupational functioning. Initial papers have described PTSD outcomes; longitudinal neuropsychological outcomes, and relationships among PTSD, TBI, and neuropsychological outcomes. Data preparation and analysis are underway for an associated study that examines the adjustment of both partners and children of the Servicemembers and Veterans in the cohort.

Assessment. Division assessment research includes work with teams from the MITRE Corporation and Massachusetts Institute of Technology Lincoln Laboratory to develop a nonintrusive method of PTSD detection based on voice analysis applied to interview recordings. This work identifies vocal markers related to timing and coordination of speech to determine the presence and severity of PTSD. The nonintrusive nature of this approach increases its potential for real-world application.

(Behavioral Science Division, continued)

Another ongoing project is closely aligned with the <u>VA</u> <u>National PTSD Brain Bank</u>. The aim is to demonstrate optimal sources of information gathering related to brain donors who could not be interviewed prior to death. For this study, direct information is collected from living elderly Veterans to determine their diagnostic status for PTSD and related

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mental disorders. This information is then used as the point of reference for comparison with indirect sources of information obtained by interviewing a close informant and examining the Veteran's medical record. The goals are to determine the best predictors from indirect sources and to provide guidance for information gathering by the PTSD Brain Bank.

The Clinical Neurosciences Division in West Haven, Connecticut, focuses on research designed to establish novel treatments and uncover biomarkers of disease mechanisms related to traumatic stress, as well as research that investigates paradigms of risk and resilience. The Clinical Neurosciences Division utilizes an interdisciplinary approach that includes treatment interventions, neuroimaging, genetics, and epidemiological studies targeted at translating discoveries into therapeutic targets for PTSD and comorbid conditions.

Biomarkers

Clinical Neurosciences Division investigators are working to characterize biochemical, structural, and functional abnormalities underlying PTSD; to elucidate brain, genetic, and environmental interactions that may affect symptom expression, treatment matching, and treatment response; and to investigate the effects of drug-induced alterations in brain and neurochemical functioning. This multifactorial pursuit of biomarker identification may lend insight into early detection of at-risk-individuals and personalized or new therapeutic approaches for PTSD.

The Clinical Neurosciences Division utilizes neurogenomics to explore interactions among genotypes, phenotypes, and the environment via state of the art approaches. This work includes significant progress from the VA National PTSD Brain Bank, which conducted large postmortem analyses and next generation sequencing, characterizing altered gene expression in five different brain regions in subjects with PTSD and major depressive disorders. A unique bioinformatic pipeline has been developed within the PTSD Brain Bank to identify gene expression patterns within and between brain regions. Analyses revealed increased neuroinflammatory signaling, as well as cell adhesion and cell proliferation in these pathways. Previous work from the PTSD Brain Bank demonstrated that a specific gene, serum/glucocorticoid regulated kinase 1 (SGK1), was dramatically decreased in the prefrontal cortex of postmortem PTSD samples. Efforts to study the functional consequences of this gene alteration, such as fear memories and fear extinction, is continuing in animal models. Investigators are also evaluating strategies for raising SGK1 levels in the brain as a potential new treatment. Several other genes of interest, including FKBP5 and NPAS4, have also been targeted to detect RNA expression in subjects with PTSD.

Data from the National Health and Resilience in Veterans Study (<u>NHRVS</u>), which surveyed a nationally representative sample of U.S. military Veterans, revealed that Veterans having both high levels of trauma exposure and a genetic variation implicated in Alzheimer's disease (i.e., the apolipoprotein E [APOE]n ɛ4 allele carrier risk genotype) reported greater severity of PTSD symptoms, particularly re-experiencing symptoms. APOE £4 allele carriers who reported both more trauma as well as higher levels of social support were less likely to screen positive for PTSD. Researchers also examined a variation in the neuropeptide Y gene (promoter rs16147) which has been shown to impact resilience to traumatic stress. Results revealed that Veterans with the "protective" genotype (T/T homozygotes) showed greater resilience to developing PTSD symptoms, particularly intrusion symptoms, even with increased levels of lifetime trauma. Investigators also continued to participate in the Million Veteran Program (MVP), where genome-wide analysis work with PTSD participants is in progress. Collaboration also continues with the PTSD PGC Workgroup and with the Army Study to Assess Risk and Resilience in Servicemembers (Army STARRS) consortium.

Clinical Neurosciences Division investigators utilize noninvasive multimodal neuroimaging methods, such as MRI, magnetic resonance spectroscopy, and positron emission tomography (PET) to investigate the structure and shape of various brain regions, functional activation patterns in gray matter, the integrity of white matter tracts, concentrations of neurotransmitters and other chemicals in the brain, as well as energy demands and usage throughout the brain. Investigators also use electroencephalogram (EEG) to evaluate changes in electrical activity in the brain pre/post ketamine treatment among patients with treatment-resistant PTSD.

Current PET research focusing on the α 7 nicotinic acetylcholine receptor (nAChR), which can "tune" signaling in brain circuitry, has revealed reduced α 7 nAChR levels in the amygdala and hippocampus of individuals with PTSD. Ongoing work is investigating the role of the α 7 nAChR as a potential biomarker and/or treatment target for PTSD. Investigators are also evaluating the role of enzyme 11beta-hydroxysteroid

(Clinical Neurosciences Division, continued)

dehydrogenase 1 (11beta-HSD1), which activates the stress hormone cortisol, in PTSD. Preliminary data suggests that individuals with PTSD have higher levels of 11beta-HSD1 in the medial prefrontal cortex and hippocampus. Other ongoing PET work is examining changes in dopamine levels in traumaexposed healthy individuals who use cannabis to determine whether changes in dopamine after smoking cannabis are associated with changes in stress-related symptoms. Investigators also continue to study neuroinflammatory processes in PTSD using PET technology. Prior work indicated a link between immune alterations and PTSD following trauma exposure. Researchers are investigating whether activation of microglial cells (i.e., cells which affect immune response in the central nervous system) contributes to a neuroinflammatory etiology of PTSD.

Investigators are using a drug challenge approach with guanfacine and perampanel to better understand how α -amino-3-hydroxy-5-methyl-4-isoxazolepropionic acid (AMPA) receptors affect trauma and mood symptoms. Results to date indicate that guanfacine alters the functioning of the prefrontal and locus coeruleus brain regions during tasks of cognitive performance.

Finally, work examining the neural basis of decision making under conditions of risk and uncertainty continues to identify biomarkers related to fear extinction, such as activity in the ventromedial prefrontal cortex (vmPFC). Functional MRI (fMRI) findings revealed reduced activity in the vmPFC of PTSD brains, with numbing symptoms significantly predicting neural activation. Additional work to pursue biomarkers related to fear learning was conducted using pupil dilation and study of cannabinoid receptor type 1 availability to examine individual differences as predictors of fear acquisition and extinction.

PTSD and Suicide

Clinical Neurosciences Division investigators are using PET technology to examine availability of metabotropic glutamate receptor type 5 (mGluR5), which has an important role in fear learning and emotion regulation, as a potential biomarker for suicidal ideation. Results revealed that individuals with PTSD had higher mGluR5 availability relative to those with major depression in multiple frontal and limbic brain regions. In PTSD individuals, mGluR5 availability was also positively correlated with avoidance, tension, and anxiety, as well as same-day suicidal ideation, effects not observed in those with depression. These findings suggest that mGluR5 may be a potential treatment target.

Clinical Neurosciences Division researchers are also investigating the use of pharmacological agents that have an acute antidepressant effect as a strategy to prevent suicide among individuals with PTSD. This work includes several projects that evaluate the anti-suicidal properties of ketamine in both treatment-resistant PTSD and depression and how neural alterations pre/post ketamine, with emphasis on synaptic connectivity, may underlie these behavioral changes.

In other work, NHRVS data revealed that moral injury was associated with suicidal thinking and attempts in combat Veterans. Specifically, transgressions by self (e.g., acting in ways that violated one's moral code or values) were associated with elevated odds of suicidal thinking, and feelings of having been betrayed by the military (e.g., feeling betrayed by fellow service members that one once trusted) were associated with a 2-fold greater likelihood of attempting suicide. These results underscore the importance of moral injury in suicide risk models and of assessing and treating moral injury in Veterans at risk for suicide.

Using the NHRVS data, investigators also examined factors that protect against the development of suicidal thinking over a 4-year period. Results revealed that 7.5% of Veterans developed suicidal thinking. Greater loneliness, disability in activities of daily living, PTSD symptoms, physical distress, alcohol use problems, and denial-based coping increased the likelihood of developing suicidal thinking. Protective factors associated with decreased likelihood of suicidal thinking included greater social support, curiosity, resilience, and acceptance-based coping.

Other work using NHRVS data observed that alcohol use disorder (AUD) and a history of homelessness increased suicide attempts in Veterans diagnosed with PTSD. Veterans with comorbid PTSD and AUD were more than 3 times as likely as Veterans with PTSD alone to have attempted suicide in their lifetimes.

Treatment Efficiency, Effectiveness and Engagement

Division researchers are currently conducting: 1) a clinical trial of repeated doses of ketamine for treatment-resistant PTSD, with an added emphasis on durability of treatment response; 2) validation of a new type of treatment for PTSD using neurofeedback to specifically target activity of the amygdala, a brain region that has been found to be hyperactive in PTSD; 3) a 7-day trial of PE enhanced with a single infusion of ketamine; 4) a project examining the effectiveness of Mindfulness Based Stress Reduction for anger and aggression in Veterans with PTSD, 5) a trial of transcranial direct current stimulation on learning, memory, and brain circuitry and 6) a trial of buprenorphine and CPT for patients diagnosed with PTSD and opiate use disorder.

Finally, using data from VA Cooperative Studies Program (CSP) Study #504, which evaluated the efficacy of risperidone for chronic, antidepressant-resistant, military service-related PTSD, investigators evaluated correlates of treatment nonresponse. Greater severity of PTSD symptoms, particularly re-experiencing (i.e., nightmares) and emotional numbing

(Clinical Neurosciences Division, continued)

(i.e., sense of foreshortened future), was associated with non-improvement to both placebo and risperidone over the 24-week trial.

DSM-5

Data from the NHRVS revealed lifetime and past-month PTSD prevalence rates of 8.1% and 4.7%, respectively, with the likelihood of developing PTSD (28.0%) highest for Veterans who experienced sexual abuse during childhood. Investigators also found that 19.2% of Veterans with lifetime PTSD and 16.1% of Veterans with past-month PTSD screened positive for the dissociative subtype. Other work examined prevalence and comorbidities associated with subthreshold PTSD, finding that 22.1% and 13.5% of Veterans screened positive for lifetime and past-month subthreshold PTSD, respectively. Subthreshold PTSD was associated with substantially elevated rates of major depression and suicidal thinking, as well as reduced mental and physical functioning. Other work comparing the prevalence of PTSD according to DSM-5 and International Classification of Diseases 11th revision (ICD-11) criteria indicated higher prevalence of lifetime and past-month PTSD using DSM-5 relative to ICD-11 criteria, suggesting that ICD-11 criteria may fail to identify a

considerable proportion of Veterans with clinically significant PTSD symptoms, thus affecting eligibility for health care, disability, and other services.

Finally, following a dimensional and structural evaluation of DSM-5 PTSD symptoms, investigators proposed a novel, 7-factor hybrid model of PTSD symptoms that includes: 1) intrusions, 2) avoidance, 3) negative affect, 4) anhedonia, 5) externalizing behaviors, 6) dysphoric arousal (e.g., sleep difficulties), and 7) anxious arousal (e.g., hypervigilance) symptom clusters. This model has been replicated in more than a dozen other trauma-affected populations worldwide. Further studies evaluated the nature and stability of the network structure of DSM-5 PTSD symptoms using stateof-the-art network modeling approaches. Results of these studies revealed that negative trauma-related emotions, flashbacks, detachment, and physiological reactivity to trauma cues were central symptoms of the disorder and may contribute to its chronicity. They further indicated that selfdestructive behaviors associated with trauma were strongly related to suicidal thinking, thus highlighting the importance of trauma-related externalizing behaviors in predicting suicide risk in Veterans.

Dissemination and Training Division

The Dissemination and Training Division in Palo Alto, California, conducts research on patient needs and preferences, implementation science, the development of novel and adapted treatments that attend to patient preferences, and the development and testing of treatments that employ the potential benefits of technology-based delivery of services.

PTSD and Suicide

Staff are developing participatory system dynamics modeling tools that clinic teams can use optimize allocate of staff resources to different clinical activities. These tools are now being expanded to suicide management, to help teams ensure effective management of Veteran patients at high risk for suicide, without compromising overall access to or quality of care.

Treatment Efficiency, Effectiveness, and Engagement

Several projects are aimed at increasing patient engagement into care, improving access to care and using technology to increase the reach, efficiency and effectiveness of treatment. One study is developing a brief measure of patient characteristics associated with effective engagement in care. The measure is expected to guide identification of the type and amount of service resources needed to engage Veterans into care. A second study will focus on racial and ethnic minority patients who have been found to experience disparities in trauma exposure and mental health care. The project will develop a risk-screening tool that identifies patients at risk for subsequent mental health problems and identify resources tailored to particular patient problems and needs to increase engagement into care. Several ongoing studies are assessing the benefits of webbased and app-based technologies to increase Veteran access to mental health care and to enhance outcomes. Telemental health services to the home are expected to increase patient engagement and access to care, but this type of service is rarely implemented to date. A hybrid effectiveness and implementation study will compare two treatments delivered to women Veterans in their homes via video teleconference: Skills Training in Affective and Interpersonal Regulation (STAIR) and Present-Centered Therapy. The goals of the study are to assess the relative effectiveness of these treatments and to identify barriers and facilitators for using video to home delivery treatment. The efficacy of a web version of Prolonged Exposure (PE), entitled web-PE, in reducing symptoms of PTSD in military personnel and Veterans is being tested. Web-PE is delivered online with therapist oversight and facilitation, and could have significant potential to increase the reach of PE to those who cannot otherwise access traditional face-to-face care. A new VA-funded study will test whether the addition of peer support increases adherence to and completion of online treatment. This trial will compare patient engagement and outcomes from using Moving Forward, a VA online version of Problem Solving Therapy, with and without peer support.

(Dissemination and Training Division, continued)

A two-site study is underway to assess the efficacy of <u>PTSD</u> <u>Coach</u> compared with traditional treatment for reducing PTSD symptoms in Veterans utilizing primary care service. Several pilot studies of mobile phone apps are near to completion, including a pilot study of app-based personalized and semiautomated coaching integrated into PTSD Coach; a pilot study of a couples-based intervention using mobile apps; and two ongoing trials of the <u>Mindfulness Coach app</u> in Veterans with PTSD and as an adjunct for Veterans receiving other types of medical care. A mobile cognitive control training for the treatment of alcohol use and PTSD will determine the efficacy of a novel neurocognitive intervention for improving recovery outcomes.

In collaboration with investigators from the Minneapolis VA, the Dissemination and Training Division is conducting a study to test a web-based intervention to help National Guard families encourage their loved ones to seek mental health care. Key questions concerning the methods and the extent to which social networks can be utilized to increase treatment engagement, and to improve mental and physical health outcomes, are being investigated in a study of another highly stressed population: cancer survivors.

Care Delivery, Models of Care, and System Factors

New efforts are underway to improve patient access to care by using participatory systems dynamics modeling: a collaborative quality improvement approach in which stakeholders identify specific system problems, use computer modeling to compare the likely outcomes of different potential solutions, and then select an optimal solution to implement. Preliminary data emerging from the project indicate substantially reduced wait times for treatment enrollment at facilities using this method compared to those using routine enrollment strategies. Additional funding has been obtained to assess the cost-effectiveness of this approach and to test its mechanisms of action.

A trial testing whether a curated online information resource can increase VA, Department of Defense (DoD), and community providers' knowledge about core elements of the VA/DoD Clinical Practice Guideline for PTSD is ongoing. Analyses are still underway, but initial results suggest that the intervention increased clinicians' familiarity with some key practices. A long-term project is the development of a practitioner network across both VA and DoD that can test strategies for implementing best practices. The network is currently engaged in quality-improvement projects, but can become a resource for implementation science research in the future.

Implementation

A new study is evaluating how to simplify assessment of the quality of delivery of cognitive-behavioral therapy (CBT) for PTSD, depression, and anxiety disorders. A second ongoing study is evaluating competing strategies intended to enhance and sustain the delivery of CPT: one strategy emphasizes fidelity to the protocol through expert consultation and online resources, and the other focuses on using continuous quality-improvement strategies to improve fit and to address barriers to treatment delivery. Investigators involved in the evaluation of the national rollout for PE are investigating the effectiveness of different training models on trainee delivery of PE. Another study compares methods of assessing treatment quality and fidelity (important implementation outcomes) for CBTs, including CPT.

In collaboration with the Minneapolis VA, investigators at two National Center Divisions are testing an implementation toolkit and facilitation to increase use EBPs in VA PTSD clinics. This project leverages findings from a prior study on organizational factors that contribute to wider use of EBPs. A new multisite trial will test whether a tailored set of implementation strategies increases the use of PE within the military health system above and beyond the impact of standard provider training. This mixed-methods study will engage stakeholders at various levels and then match implementation strategies to site-specific barriers and facilitators. National Center staff are also supporting and helping to evaluate VA's efforts to implement measurementbased care (MBC).

Other Important Research

A database is in the process of being developed to house and organize national patient level data regarding PTSD assessment and treatment characteristics. This "at-yourfingertips" database will provide specific and critical information about VA delivery of PTSD care that will quickly orient researchers about important gaps in knowledge and critical next questions to investigate regarding PTSD care.

Evaluation Division

The Evaluation Division in West Haven, Connecticut, supports the National Center's mission through a programmatic link with the VA's <u>Northeast Program Evaluation Center (NEPEC)</u>. NEPEC has broad responsibilities within the VA Office of Mental Health and Suicide Prevention (OMHSP) to evaluate their treatment programs, including those for specialized treatment of PTSD. Although NEPEC is primarily engaged in evaluation research, is also works on independent research projects related to the treatment of PTSD.

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Treatment Efficiency, Effectiveness, and Engagement

NEPEC has continued to monitor and assess PTSD treatment at VA. The monitoring includes both residential and outpatient specialty treatment programs, as well as PTSD treatment by trained providers not working within one of the PTSD specialty programs. The Evaluation Division via NEPEC also monitors efforts to improve psychotropic medication prescribing practices at the Veterans Health Administration (VHA). Two of the measures in this initiative are the use of antipsychotics to treat PTSD and the use of benzodiazepines without an appropriate diagnosis or medical indication.

The Clay Hunt Suicide Prevention Act of 2016 required that VA employ an outside independent evaluator to determine the effectiveness, cost effectiveness and satisfaction with VA mental health programs. Evaluation Division staff served as the primary liaison to the Clay Hunt evaluation team, providing data, methodological consultation and contextual interpretation for findings of the evaluation studies. The first annual report of these findings concluded that both outpatient specialized PTSD care and residential PTSD services are effective at reducing symptoms and improving functioning in the first 90 days of treatment, are cost effective, and that Veterans are largely satisfied with services. The evaluation studies will continue annually, with a more in-depth look at the role of concurrent mental health treatment and comorbidity a focus of evaluation in the coming year.

The Evaluation Division continues research on PTSD health services research, pain management, and the role of pain in the treatment of PTSD, as well as on sex differences in the health of returning Veterans. Data collection for a study of the implementation of two EBPs—PE and CPT—in 38 VA residential treatment programs (RTPs) for PTSD has been completed. Findings continue to be published on provider perspectives on perceived effective residential treatment ingredients, provider perceptions of dissuading factors to the use of PE and CPT, and changes in implementation of PE and CPT over time.

The Evaluation Division has a number of investigators using administrative data to explore treatment patterns and outcomes of PTSD care. Studies of medication use for the treatment of PTSD, as well as on correlates of selfreported PTSD symptom severity scores over time, have been published. During FY 2019, the Evaluation Division will further examine the role of pain in specialized PTSD treatment and in the treatment of comorbid PTSD and pain, and will continue publishing results from the Survey of Returning Veterans (SERV) interviews.

Care Delivery, Models of Care, and System Factors The MBC in Mental Health Initiative, which was formally launched by OMHSP in June 2016, completed its second year of work. As part of Phase II of the Initiative, every intensive substance abuse outpatient program and every RTP was required to implement MBC. Two Evaluation Division staff are supporting the initial pilot program evaluation; members of the Executive Division and the Dissemination and Training Division are involved in the senior leadership of the Initiative. Additional investigators from within the Center are closely involved in the evaluation study itself, as well as in the Communications, Education and Training, and Coaching work groups. The National Center investigators from the Dissemination and Training Division secured a contract with the RAND Corporation to perform in-depth interviews with MBC project directors, frontline provider-Veteran dyads, and individual providers to better understand their experiences with MBC, and those data have been collected and are currently being analyzed. As the Initiative moves into its third year, NCPTSD members will continue to be active participants as investigators and as Initiative leaders.

The national Psychotropic Drug Safety Initiative has entered its fifth year and has been tracking data on changes in practice in prescribing for PTSD, seeing a continued drop in the use of benzodiazepines among Veterans with PTSD. The Evaluation Division continues its work with technical advisors at the PTSD Mentoring Program and at the OMHSP to provide technical assistance to this Initiative. The Division also continues to respond to requests from specialized programs and staff in the field on policy, operations, handbook implementation, and the provision of evidence-based practices.

Other Important Research

Recruitment has finished for the SERV study, which is a repeated panel study of gender differences in psychiatric status and functioning among Operation Enduring Freedom, Operation Iragi Freedom, and Operation New Dawn Veterans. SERV recruited 850 participants who were interviewed at three-month intervals for at least a year; a sizeable subset continued interviewing for up to three years. Over 40% of the sample is women. Follow-up rates are 80% - 85%. Analyses in a number of areas have been undertaken, with seven manuscripts published, in press or under review. The Evaluation Division is looking for investigators interested in analyzing the SERV data, or in leveraging the SERV sample in add-on or other primary data collection studies. Papers have been published on military sexual trauma (MST) and PTSD as they relate to unit cohesion, gender differences in prevalence rates of disorders over time, and characteristics of Veterans endorsing sex addiction items. Other papers and presentations are in progress on insomnia and PTSD symptoms, suicidal ideation and behaviors, and behavioral addictions. SERV data and an add-on study have been used to develop a pornography addiction scale that is currently in testing for psychometric properties; results in international samples are positive.

Executive Division

The Executive Division in White River Junction, Vermont, provides leadership, directs program planning, and promotes collaboration to facilitate optimal functioning of the other Divisions both individually and collectively. The Executive Division specializes in the development and evaluation of innovative and authoritative educational resources, in programs that disseminate and implement best management and clinical practices, and in the use of technologies to reach a broad range of audiences. The Executive Division also oversees the administration of VA's National PTSD Brain Bank. The Executive Division does not have a specific research mission; investigators are involved in independent and collaborative research in a number of domains such as treatment outcome research, shared decision-making, and biological research.

Biomarkers

Dr. Matthew Friedman, Senior Advisor to the National Center, continued to coordinate the operations of VA's first National PTSD Brain Bank. The PTSD Brain Bank supports the Presidential Executive Order of August 2012 on deployment health by enabling VA to lead the nation in unique research that will facilitate deeper understanding of the causes and consequences of PTSD, as well as furthering assessment and treatment techniques. Enrollment of potential postmortem donors began in May 2015 with the launch of the PTSD Brain Bank website. Initially, the Brain Bank was a five-part consortium; it has subsequently grown to seven parts, with facilities at six VA Medical Centers (Miami, Florida; Durham, North Carolina; Boston, Massachusetts; San Antonio, Texas; West Haven, Connecticut; and White River Junction, Vermont) and the Uniformed Services University of the Health Sciences. The Clinical Neurosciences Division is the primary data analysis site; please see the Clinical Neurosciences Division narrative for more information about ongoing research endeavors utilizing PTSD Brain Bank tissue.

As of the end of FY 2018, the Brain Bank had 218 PTSD and comparison frozen hemispheres (roughly divided in thirds from donors with PTSD, donors with major depression, and healthy controls). In addition, the Brain Bank has 22 fixed hemispheres. An additional 90 prospective tissue donors have volunteered to be followed over their lifetimes. The Brain Bank has begun an exciting collaboration with the Lieber Institute for Brain Development that will obtain RNA sequencing and DNA methylation data from ten brain regions from over 300 brains, divided between PTSD, major depressive disorder, and healthy controls.

Executive Division investigators are also involved in biomarkers research utilizing fMRI and EEG. One ongoing project is the first study of the neural correlates of social working memory in PTSD. Investigators are testing whether PTSD is characterized by difficulties maintaining and manipulating social information on a moment-to-moment basis and whether such difficulties are associated with poorer social connection. A separate study is using EEG, eye tracking, and behavioral measures to examine the interaction between emotional processing and attentional functioning in healthy adult participants and trauma-exposed individuals with and without PTSD.

PTSD and Suicide

Executive Division researchers continue to advance the new priority area of PTSD and suicide through collaborations with the National Center for Patient Safety (NCPS), OMHSP, and the Center of Excellence for Prevention of Suicide (COE). Pilot work sponsored by NCPS has led to the development of two largedata oriented grant proposals to VA and DoD, the most recent of which seeks to evaluate the effect of evidence-based PTSD treatments on reduction in death by suicide. An ongoing collaboration with OMHSP validated a prior finding about high-risk periods for suicide following psychiatric discharge. These findings have supported current pilot work in high-risk populations at the White River Junction VA. Ongoing work with the COE evaluates potential misclassification in suicide outcomes. Finally, a separate study is using semantic analysis of clinical note text to evaluate ruptures in therapeutic alliance preceding death by suicide in a VA PTSD treatment population.

Treatment Efficiency, Effectiveness, and Engagement

The Executive Division has a long history of participation in VA's CSP. During FY 2018, enrollment for CSP #591, a groundbreaking study comparing PE and CPT at 17 VA facilities across the country, was completed. The investigators enrolled 916 participants, more than the 900 that were anticipated. Data collection is projected to end in the 2nd quarter of FY 2019. Findings will help VA leadership, clinicians, and Veterans make informed choices about the delivery of PTSD care in VA, and will also be broadly relevant to the scientific and clinical communities outside VA.

The National Center for PTSD previously developed <u>AboutFace</u>, a public awareness campaign to help Veterans recognize PTSD and motivate them to seek best practice treatment. In FY 2018, investigators launched a project in which they will examine the impact of AboutFace on engagement in and completion of evidence-based treatment among Veterans with PTSD. They will also examine the impact of AboutFace on stigma and attitudes toward mental health services.

Investigators continue to focus on treatments for conditions that frequently co-occur with PTSD and to examine novel treatments for PTSD. Data collection for a trial comparing two psychotherapies for comorbid AUD and PTSD (PE and Seeking Safety) was completed in December 2017. Primary outcome analyses are underway. Recruitment for a trial that is evaluating the combination of topiramate and PE for co-

(Executive Division, continued)

occurring PTSD and AUD is ongoing. Investigators continue collaborations with the PTSD specialty clinics and with the residential PTSD/substance use treatment program at the San Diego VA to develop ways to use clinical data for research. An ongoing pilot study is investigating the safety and efficacy of a novel form of synchronized transcranial magnetic stimulation for PTSD with comorbid depression; results are expected in FY 2019. The first study of cannabidiol-enhanced PE in Veterans was funded in FY 2018 and will launch in FY 2019. Lastly, a trial to evaluate a brief protocol to reduce guilt and shame related to a traumatic event among Veterans of Iraq and Afghanistan is midway through recruitment.

Care Delivery, Models of Care, and System Factors

The Executive Division is working on several initiatives aimed at assessing models of care and at improving evidence-based practice. Investigators continue to analyze data and publish results from a national survey that assessed the treatment needs and preferences of Veterans and non-Veterans with PTSD symptoms. Results of this survey informed the development of the first publicly available online treatment decision aid for PTSD, which was released to the National Center website in March 2017. The <u>PTSD Treatment Decision</u> <u>Aid</u> is interactive and enables users to identify preferences among treatment options and print that information to share with their provider. Current work focuses on evaluating patient preferences for evidence-based PTSD treatments and investigating how different methods of presenting treatment information can impact these preferences.

Executive Division investigators continue to examine the impact of facilitation and an academic detailing intervention, in which a pharmacist and psychologist reach out directly to VA clinicians in rural clinics, to improve PTSD treatment practices throughout VA New England Healthcare System. In a new initiative, investigators expanded their intervention

to rural facilities outside of New England to share guidelinerecommended practices for PTSD. Special emphasis was placed on unique methods to reduce benzodiazepine prescribing through a Direct-to-Consumer educational outreach approach. Additionally, innovative natural language processing methods are being used to identify rural sites across the country that are low in delivery of EBPs.

In addition to projects aimed at improving clinical practices, investigators are continuing to assess the state of VA care for PTSD. Ongoing work applies novel informatics and operational methods to medical and administrative data in order to understand multiple dimensions of quality of PTSD care within VA. In FY 2018, investigators determined the longitudinal use of EBP and evidence-based antidepressants (EBAs; fluoxetine, sertraline, paroxetine, and venlafaxine) over the 10-year period of observation. With regards to uptake of EBPs, there was a steady increase in the use of PE and CPT over the 10-year period but little change in the use of EBAs. Planned projects include development of quality standards for EBP and EBA receipt that are reflective of improvement in PTSD symptoms, and to use these standards to establish predictors of the receipt of effective and timely PTSD treatment.

DSM-5

In collaboration with the Behavioral Science Division, the Executive Division is leading a study to provide further validation of the <u>PC-PTSD-5</u>, which is currently used across VA for mandatory PTSD screening. Although initial validation has been completed, the ongoing study, which uses the <u>CAPS-5</u> as the criterion index, will provide more definitive information regarding the most appropriate cutoff scores and will allow investigation of the screen's ability to detect PTSD in key subgroups such as women. Data collection will be completed by the end of FY 2018.

Pacific Islands Division

The Pacific Islands Division in Honolulu, Hawaii, was created to advance PTSD work in the Pacific Rim; to focus on improving access to care by increasing understanding of cultural attitudes and the bases of racial and ethnic disparities in treatment; and to evaluate the use of advanced technology, such as telemedicine, to reach out to Veterans who are otherwise unable to access adequate care.

Treatment Efficiency, Effectiveness, and Engagement

Three major projects are aimed at evaluating different methods of delivering PTSD treatment. Investigators are in the dissemination phase of a large trial that examines Veterans' preferences for and the clinical efficacy of three modalities for the provision of PE: two involving technology and one involving in-home visits to Veterans. A second trial that compares different treatments for in-home delivery of a couples-based intervention for PTSD was recently launched; this study examines the clinical efficacy of Cognitive-Behavioral Conjoint Therapy for PTSD, and compares homebased care to traditional office-based care. A new trial in collaboration with the Dissemination and Training Division is looking at home-based STAIR treatment for women Veterans who have experienced MST. Lastly, an additional collaboration involves a multi-site trial comparing standard PE with PE incorporating a partner.

(Pacific Islands Division, continued)

Other Important Research

Several ongoing studies examine the prevalence of PTSD, response to treatment, and presence of related mental health comorbidities in ethnic minority populations. These studies identify unique risk and resilience correlates of PTSD among ethnically and racially diverse Veterans, and the effects of those correlates on Veterans' response to evidence-based PTSD treatments.

Researchers continue a study initiated in FY 2017 that uses data from the Honolulu Asian-Aging project to look at the effects of military service combat exposure in particular on late-life dementia, as well as on marital and family structures, mental health, and physical health among Japanese-American men. An ongoing project conducted in conjunction with the Military Family Research Institute at Purdue University examines sociocultural and community influences on mental health decision-making among male and female African American, Latino, Asian American and white Veterans who are starting PTSD care in a VA mental health clinic. This mixed-methods study uses qualitative phone interviews, follow-up surveys, and census information. Part 1 of the interview examines who in their social networks veterans talk to about mental health problems and treatment, how much they value that input, and why. Other parts of the interview and the follow-up survey examine experiences with and conceptualization of PTSD, treatment, and treatment providers. Additional projects include collaborations on a national qualitative study examining drop-out from EBPs with investigators from the Women's Health Sciences Division and Minneapolis Health Services Research & Development Center of Innovation, and a project developing a statistical methodology that will allow for estimation of individual factor contributions in observational studies where models include functional data as either an outcome or as one of a large number of covariates.

Women's Health Sciences Division

The Women's Health Sciences Division in Boston, Massachusetts, specializes in the study of women Veterans and non-Veterans, with a particular focus on understanding gender differences in trauma exposure and posttrauma psychopathology.

Biomarkers

Biomarkers work at the Women's Health Sciences Division includes studies aimed at explaining the basic biological processes underlying PTSD with particular relevance to women: a study examining the role of neurobiological and psychosocial factors that impact negative pregnancy outcomes among women with PTSD; data analysis on a study of sex hormones and derivatives associated with decreased retention of extinction learning across the menstrual cycle in women with PTSD; a series of studies of the gene-environment interplay in the comorbidity of PTSD and eating disorders; and a study of GABA-ergic neuroprotective steroids in men and in women across the menstrual cycle. Recently published work using plasma measures has demonstrated that women with PTSD are at heightened risk for decreased conversion of progesterone into its anxiolytic metabolites.

Studies investigating the role of biomarkers in intervention efforts include a study investigating whether a specific electrophysiological response pattern to a series of loud tones is predictive of selective serotonin reuptake inhibitor (SSRI) response among men and women, in an effort to identify individuals who are likely to respond to SSRI treatment. The Women's Health Sciences Division is also working on two studies investigating the role of progressive exercise training, to determine whether it affects participants' capacity for releasing shared neurohormones to help reduce or better manage chronic pain (including fibromyalgia) and PTSD symptoms.

PTSD and Suicide

Ongoing work in the area of suicide includes a large-scale epidemiologic machine learning study of suicide. Specifically, using data from the entire population of Denmark from 1995-2015 investigators are applying machine learning techniques to develop prediction models for suicide attempt and death from suicide. Analyses will be conducted on the full population, as well as among subgroups including all of those diagnosed with PTSD and women diagnosed with PTSD.

Treatment Efficiency, Effectiveness and Engagement

Recent efforts focused on treatment engagement identified that Veterans who were unwilling to engage in PTSD or depression treatment were willing to seek treatment for sleep difficulties, suggesting this may be an important gateway to engaging some Veterans into treatment. Other work has examined treatment engagement of subpopulations of interest, including an examination of PTSD treatment seeking experiences in a sample of discrimination-based traumaexposed lesbian, gay, bisexual, and transgender Veterans.

Several intervention studies are examining more efficient treatment formats for CPT. With support from the <u>South Texas</u> <u>Research Organizational Network Guiding Studies on Trauma</u> <u>and Resilience (STRONG STAR)</u> Consortium, investigators are continuing to analyze data from a recently completed study comparing the relative effectiveness of CPT delivered in an individual format with that delivered in a group format. Also, through STRONG STAR, staff are investigating a variable-length CPT protocol testing the efficacy of the intervention when

(Women's Health Sciences Division, continued)

treatment end is determined by patient progress. Another trial will test the efficacy of CPT delivered in an intensive outpatient format with active-duty military Servicemembers.

In terms of treatment effectiveness, investigators are working to improve adherence to existing PTSD treatments. A current study is exploring Veteran and provider perspectives on reasons for dropout from both CPT and PE to develop an intervention aimed at increasing rates of completion for these treatments.

Other intervention studies focused on traumatized populations include an open trial to test the effectiveness of a therapist-assisted self-management intervention intended to increase self-efficacy and facilitate greater community engagement following a successful course of PTSD treatment. Another ongoing intervention examines the effectiveness and fit of a transdiagnostic treatment, the Unified Protocol, for trauma-exposed Veterans with co-occurring diagnoses.

The Women's Health Sciences Division is also focused on intervention research among those who have not necessarily been diagnosed with PTSD, including examination of the effectiveness of a national network of peer-facilitated psychoeducation and support groups for women Veterans who want to improve their well-being, titled <u>WoVeN: The Women Veterans Network</u>.

Care Delivery, Models of Care and System Factors

The Division's focus on care delivery within VHA emphasizes care for conditions with particular relevance to women Veterans. These include a mixed-methods investigation of Veterans' experiences with and preferences for VHA's universal MST screening program. Two additional studies are investigating VHA health care use related to eating disorders, in a nationally representative sample of male and female Veterans and a large cohort of post-9/11 male and female Veterans. These investigations will also look to identify barriers to mental health care use, generally and specific to eating disorders.

Additional work has focused on understanding patterns of service use among post-9/11 Veterans. The <u>Veterans Metric</u> <u>Initiative</u> is a large-scale longitudinal study investigating newly separated Servicemembers' reintegration experiences and use of transition programs, services, and supports. Recent analyses highlight several key differences between the post-military readjustment of male and female Veterans, including female Veterans' greater likelihood of experiencing mental health concerns and seeking health care within the first year after separation.

Investigators also continue to analyze data from a study of the effects of deployment stressors and resulting mental health conditions on Veterans' quality of life and healthcare use. A key focus of current analyses is the relationship between Veterans' functioning and their service use, with findings suggesting that functional impairments may serve as a facilitator of treatment seeking for women whereas it may impede treatment seeking for men.

Implementation

Investigators within the Women's Health Sciences Division are conducting implementation research focused on identifying and disseminating best practices for intimate partner violence (IPV) identification, assessment, treatment, and the targeting of health services within the VHA context. In terms of screening, investigators conducted a national qualitative evaluation of early and late adopting VA Medical Centers to identify best clinical practices for IPV screening and response practices, as well as successful implementation strategies to be used to scale-up these practices throughout VA primary care. A complementary study evaluated the reach, adoption, and effectiveness of a risk assessment screening tool for women who experience IPV and found that implementation of the tool is associated with increased access to psychosocial services. These findings are being adopted within VHA in a planned randomized program evaluation to assess the implementation impact and effectiveness of IPV screening programs.

In terms of implementation of interventions associated with IPV, investigators recently began a multi-site effectivenessimplementation clinical trial of a brief counseling intervention for women who are experiencing violence in their intimate relationships. This study incorporates a hybrid methodology to inform both the effectiveness of the intervention and expansion of the intervention throughout VA.

Other Important Research

Within the Women's Health Sciences Division, research beyond these key operational priorities generally focuses on investigations of key, understudied gender differences or better characterizing the experiences and health burden experienced by women who have been exposed to trauma. As part of improving the understanding gender differences in stress, trauma, and related psychiatric outcomes, the Longitudinal Investigation of Gender, Health, and Trauma study is a national survey of Veterans, focusing on more clearly delineating the impact of trauma and community violence on mental, physical, and reproductive health among both women and men.

Investigators are also seeking to pioneer scientific inquiry in the area of head injury in women suffering from PTSD secondary to IPV to understand the interactive biological and psychological mechanisms that underlie comorbid PTSD and TBI. A key aim is to begin to develop multimodal treatments for comorbid PTSD and TBI that investigators would hypothesize to be more effective than current, single modal

(Women's Health Sciences Division, continued)

strategies. Investigators will be able to examine sex differences across domains of measurement by comparing this sample with comparable male samples.

The health of older women Veterans is another area of focus. One study is examining the impact of military and other lifetime stress exposures and mental health results, with a focus on PTSD, on later life health, functioning, and disability in Vietnam-era women Veterans. In collaboration with investigators in the Behavioral Science Division, a follow-up study of female and male Vietnam-era Veterans is examining predictors of mortality, as well as changes in physical and mental health-related well-being over time.

Appendix C: Fiscal Year 2018 Funding

VA Cooperative Studies Program (CSP)

Principal Investigator	Research Title	Years	Current Funding	Total Funding
Krystal	CSP #2016: Adaptive Clinical Trial for Insomnia in Veterans with PTSD (ACTIVe-PTSD)	2018-2023	\$0	\$24,467,860
Schnurr, Chard, & Ruzek	CSP #591: Comparative Effectiveness Research in Veterans with PTSD (CERV-PTSD)	2013-2018	\$2,567,053	\$9,048,760

Other VA Sources

Principal Investigator	Research Title	Funding Source	Years	Current Funding	Total Funding
Averill	Intrinsic Functional Connectivity and Cognition in Posttraumatic Stress Disorder	VISN 1 (CDA)	2016-2018	\$124,032	\$249,304
Averill	Structural and Functional Correlates of Suicidality in Veterans with PTSD	CSR&D (CDA)	2019-2023	\$0	\$1,680,000
Bernardy	Identifying Rural Areas of Low Evidence-based PTSD Care Delivery and Exploring the Feasibility of Intervening with Virtual Facilitation and e-Detailing	ORH	2019-2020	\$0	\$416,932
Bernardy	Measuring the Impact of the Use of Academic Detailing to Improve PTSD Treatment	ORH	2017-2018	\$299,697	\$299,697
Bovin & Schnurr	Validation of the PTSD Primary Care Screen	HSR&D	2017-2019	\$205,925	\$461,933
Carlson	Pilot Study of Standalone and Peer Supported Online Problem Solving Program in Veterans with Untreated Mental Health Problems	HSR&D	2018-2019	\$33,000	\$100,000
Cloitre	Office of Rural Health webSTAIR Program	ORH	2016-2021	\$1,336,740	\$12,088,620
Cloitre	Connecting Women to Care: Home-based Psychotherapy for Women with MST Living in Rural Areas	HSR&D	2018-2022	\$241,497	\$1,095,979
Colvonen	The Impact of Integrated CBT-I and PE on Sleep and PTSD Outcomes	RR&D (CDA)	2016-2021	\$187,332	\$950,687
Grubaugh & Hamblen	A Randomized Controlled Trial of AboutFace: A Novel Video Storytelling Resource to Improve Access, Engagement, and Utilization of Mental Health Treatment among Veterans with PTSD	HSR&D	2018-2022	\$243,500	\$1,001,900
Hamblen	CBT for PTSD in Veterans with Co-occurring Substance Use Disorders	CSR&D	2012-2018	\$0	\$892,314
Hamilton & Kimerling	Enhancing the Mental and Physical Health of Women Through Engagement and Retention (EMPOWER)	QUERI	2015-2020	\$830,000	\$4,150,000
Heinz	Cognitive Remediation for Alcohol Use Disorder and PTSD	RR&D (CDA)	2014-2019	\$191,703	\$986,195

(Other VA Sources, continued)

Principal Investigator	Research Title	Funding Source	Years	Current Funding	Total Funding
lverson	Addressing Intimate Partner Violence Among Women Veterans: Evaluating the Impact and Effectiveness of VHA's Response	HSR&D	2018-2019	\$50,000	\$50,000
lverson	Intimate Partner Violence Screening Programs in VHA: Informing Scale-Up and Spread of Best Practices	HSR&D	2017-2018	\$89,000	\$98,600
lverson	Presidential Early Career Award for Scientists and Engineers	HSR&D	2014-2019	\$25,000	\$125,000
lverson	Recovering from Intimate Partner Violence Through Strengths and Empowerment (RISE): Tailoring and Evaluating a Patient-Centered Counseling Intervention for Women Veterans	HSR&D	2018-2021	\$274,556	\$853,362
Kachadourian	Mindfulness Treatment for Anger in Veterans with PTSD	CSR&D (CDA)	2017-2021	\$129,304	\$732,428
Kachadourian	Using EMA to Assess Aggression Perpetration in Veterans with PTSD and Chronic Pain	HSR&D/ PRIME Center	2017-2018	\$3,609	\$3,609
Keane	CAP-Administrative Core*	VA/DoD	2016-2020	\$366,356	\$1,231,923
Kehle-Forbes	Dropout from Evidence-based Therapy for PTSD: Reasons and Potential Interventions	HSR&D	2015-2018	\$258,679	\$799,130
Kehle-Forbes	Pilot Test of a Self-Management Program for Completers of Trauma-Focused Therapy	RR&D	2018-2020	\$84,991	\$196,495
Kimerling	Development of a Patient-Reported Measure to Assess Healthcare Engagement	HSR&D	2018-2020	\$329,726	\$960,248
Knight	LED Light Therapy to Improve Cognitive-Psychosocial Function in TBI-PTSD Veterans	RR&D	2015-2018	\$0	\$199,976
Krystal & Abdallah	CAP-Ketamine for Antidepressant-Resistant PTSD: A Translational Neuroscience, Biomarker-Informed Clinical Trial*	VA/DoD	2016-2020	\$488,000	\$1,588,594
Kuhn	An RCT of a Primary Care-Based PTSD Intervention: Clinician-Supported PTSD Coach	HSR&D	2017-2020	\$275,000	\$1,100,000
Loflin	Cannabidiol as an Adjunctive to Prolonged Exposure for the Treatment of PTSD	CSR&D (CDA)	2019-2023	\$0	\$1,310,332
Landes (PI), Rosen (Site PI)	Risk Stratified Enhancements to Clinical Care: Targeting Care for Patients Identified Through Predictive Modeling as being at High Risk for Suicide	HSR&D	2016-2020	\$84,293**	\$1,222,926
Logue	Early Cognitive Impairment as a Function of Alzheimer's Disease and Trauma	BLR&D	2018-2020	\$147,368	\$296,877
Logue	Genetic and Epigenetic Biomarkers of PTSD	BLR&D	2017-2020	\$144,376	\$610,600
McGlinchey (PI) , Rasmusson (Site PI)	VA Center of Excellence: Translational Research Center for TBI and Stress Disorders	RR&D	2014-2019	\$0***	\$5,000,000
Miller	Magnetic Resonance Spectroscopy and Genetic Analysis of Oxidative Stress in OEF/OIF Veterans with PTSD and TBI	CSR&D	2018-2021	\$150,000	\$600,000
Morland	An Integrative Technology Approach to Home-based Conjoint Therapy for PTSD	RR&D	2016-2020	\$259,500	\$1,038,000
Niles	Novel Interventions for Gulf War Veterans' Illnesses	CSR&D	2016-2021	\$336,136	\$1,664,578
Norman	Topiramate and Prolonged Exposure for Alcohol Use Disorder and PTSD	RR&D	2018-2022	\$149,648	\$927,733
Oslin (PI), Gelernter (Site PI)	PRIME Care (PRecision medicine In MEntal health Care)	HSR&D	2017-2022	\$75,701**	\$11,306,320
Peterson & Keane	Consortium to Alleviate PTSD (CAP)	VA/DoD	2013-2020	\$5,545,118	VA: \$21,000,000

(Other VA Sources, continued)

Principal Investigator	Research Title	Funding Source	Years	Current Funding	Total Funding
Petrakis	Optimal Treatment of Veterans with PTSD and Comorbid Opiate Use Disorder (OUD)	BLR&D	2018-2023	\$150,000	\$750,000
Pietrzak & Tsai	Veterans Study of Knowledge and Attitudes of VA Healthcare	VISN 1 Strategic Initiative to Expand Education and Research	2018-2019	\$26,298	\$26,298
Pineles	An Electrophysiological Predictor of SSRI Response in Veterans with PTSD	CSR&D	2019-2023	\$0	\$599,531
Pless Kaiser	Improving Psychosocial Functioning in Older Veterans with PTSD	RR&D (CDA)	2017-2021	\$156,509	\$809,149
Scioli-Salter	Neurobiological and Psychological Benefits of Exercise in Chronic Pain and PTSD	RR&D (CDA)	2013-2018	\$189,919	\$953,342
Scioli-Salter	Neurobiological and Psychological Benefits of Fibromyalgia and PTSD	RR&D	2017-2019	\$63,275	\$199,904
Shiner	Improving Care for PTSD	HSR&D (CDA)	2014-2019	\$172,218	\$1,292,446
Shiner	Patient Safety Center of Inquiry: Prevention of Suicide	NCPS	2015-2018	\$123,500	\$421,500
Shiner	Patient Safety Center of Inquiry: Prevention of Suicide (Renewal)	NCPS	2018-2021	\$0	\$526,809
Sloan	Group CBT for Chronic PTSD: A Randomized Clinical Trial	CSR&D	2015-2018	\$0	\$235,707
Sullivan	Neural Metabolic Stress in mTBI and PTSD	CSR&D (CDA)	2018-2023	\$170,127	\$877,915
Thompson-Hollands	An Adjunctive Family Intervention for Individual PTSD Treatment	CSR&D (CDA)	2017-2021	\$181,373	\$743,010
Wolf	Presidential Early Career Awards for Scientists and Engineers Funding	CSR&D	2016-2021	\$25,000	\$125,000
Wolf	PTSD-Related Accelerated Aging in DNA Methylation and Risk for Metabolic Syndrome	CSR&D	2016-2020	\$150,000	\$600,000
Zulman & Kimerling	Making Connections: Tablet-Enabled Telehealth to Enhance Veterans' Access and Care	QUERI	2016-2018	\$425,964	\$550,669

BLR&D Biomedical Laboratory Research & Development Service; CDA Career Development Award; CSR&D Clinical Science Research and Development Service; DoD Department of Defense; HSR&D Health Services Research and Development Service; NCPS National Center for Patient Safety; ORH Office of Rural Health; PRIME Pain Research, Informatics, Multimorbidities, and Education; QUERI Quality Enhancement Research Initiative; RR&D Rehabilitation Research and Development Service; VISN Veterans Integrated Service Network; VA Veterans Administration

*Sub-award within the total \$21 million CAP award to VA; total CAPS award including DoD funds = \$42,000,000.

**Indicates FY2018 funds allocated to funded site PI.

***No direct funding provided to NCPTSD but in-kind support provided.

National Institutes of Health (NIH)

Principal Investigator	Research Title	Funding Source	Years	Current Funding	Total Funding
Abdallah	Examining the Effect of Ketamine on Glutamate/ Glutamine Cycling	NIMH	2013-2019	\$168,080	\$912,630
Abdallah	Glial and Synaptic Functions in Major Depression	NIMH	2017-2022	\$311,527	\$2,493,229
Adams	Enhancement of Extinction Learning Using Transcranial Direct Current Stimulation	NIMH (K)	2017-2022	\$159,730	\$940,801
Agarwal (PI), Gelernter (Site PI)	Psychiatric Genomics Consortium: Find Actionable Variation	PGC via NIH et al.	2016-2021	\$0***	\$932,488

(National Institutes of Health, continued)

Principal Investigator	Research Title	Funding Source	Years	Current Funding	Total Funding
Carlson	Development of a Risk Factor Screen for Mental Health Problems after Sudden Illness or Injury	NIMHD	2017-2021	\$954,600	\$2,566,642
Clouston & Pietrzak	A Life Course Approach to Integrating Trauma and Cognitive Aging: A Cohort of 9/11 Responders	NIAAA	2015-2020	\$573,065	\$2,865,325
Cosgrove	Imaging Molecular Mechanisms of Tobacco Smoking Withdrawal	NIDA	2016-2020	\$447,737	\$2,238,685
Cosgrove & Pietrzak	Imaging Microglial Activation in PTSD using PET	NIMH	2017-2022	\$499,999	\$825,495
Davis	Dysregulation in mGluR5 as a Marker of BPD and Suicide-related Endophenotypes	NIMH (K)	2018-2023	\$196,278	\$983,483
Driesen & Krystal	Assessing the Relationship Between Cortical Oxidative Metabolism and Working Deficits Under NMDA Receptor Blockade	NIMH	2017-2019	\$153,125	\$251,125
Duman	Role of GABA Interneurons in Rapid Antidepressant Actions of NMDA Receptor Blockade	NIMH	2017-2022	\$510,206	\$2,340,351
Duman	Synaptic Mechanisms Underlying the Rapid Antidepressant Actions of Scopolamine	NIMH	2014-2019	\$431,989	\$2,164,744
Esterlis & Pietrzak	Depression and Accelerated Brain Aging: A PET Imaging Study	NIMH	2018-2023	\$0	\$4,051,532
Esterlis	Glutamate Neurotransmission in Bipolar Depression and Mania	NIMH	2017-2019	\$150,000	\$460,625
Esterlis	In Vivo Imaging of a Neural Marker of Suicidal Behavior in Bipolar Disorder	NIMH	2018-2023	\$490,000	\$2,500,000
Esterlis	PET-fMRI Study of Glutamate and Frontal Function in Bi- and Uni-polar Depression	NIMH	2015-2020	\$496,729	\$2,146,470
Esterlis	Role of Neuroinflammation in the Pathophysiology of Bipolar Depression	NIMH	2017-2019	\$149,866	\$460,625
Fichtenholtz (PI), Sippel (Site PI)	Neural Mechanisms of Emotional Vigilance in Posttraumatic Stress Disorder (PTSD)	NIH/NH- INBRE	2018-2020	\$4,650**	\$84,501
Gelernter	Genetics of Opioid Dependence	NIDA	2013-2018	\$1,077,916	\$4,852,913
Gelernter	PTSD Genomewide: Genetics, Expression, and Epigenetics	NIMH	2019-2024	\$0	\$3,349,678
Gradus	Characterizing Trauma Outcomes: From Pre-trauma Risk to Post-trauma Sequelae	NIMH	2017-2021	\$319,091	\$1,303,518
Gradus	Risk Profiles for Suicidal Behavior in the General Population	NIMH	2016-2020	\$321,827	\$1,375,793
Gutner	Effectiveness of a Unified Transdiagnostic Treatment in Routine Clinical Care	NIMH (K)	2014-2019	\$180,992	\$889,721
Han & Gelernter	Fine Mapping a Gene Sub-network Underlying Alcohol Dependence	NIAAA	2014-2018	\$34,193	\$350,914
Harpaz-Rotem & Schiller	Fear Learning and Reconsolidation After Trauma Exposure: A Computational Approach	NIMH	2014-2019	\$429,080	\$1,830,328
Harpaz-Rotem & Hampson	Neurofeedback of Amygdala Activity for PTSD	NIMH	2018-2020	\$533,000	\$1,066,000
Keane	Postdoctoral Training in PTSD	NIMH	2016-2020	\$242,965	\$1,021,231
Lee & Heinz	Mobile Cognitive Control Training for the Treatment of Alcohol Use Disorder and PTSD	NIAAA	2017-2018	\$224,702	\$224,702
Malison & Gelernter	Identifying Methamphetamine Risk Variants by Extreme Phenotype Exome Sequencing	NIDA	2015-2020	\$600,000	\$2,595,844

(National Institutes of Health, continued)

Principal Investigator	Research Title	Funding Source	Years	Current Funding	Total Funding
McKee & Cosgrove	Translational Center to Develop Gender Sensitive Treatments for Tobacco Smoking	NIDA	2012-2018	\$0	\$3,742,805
Morey (PI), Logue (Site PI)	Trauma and Genomics Modulate Brain Structure across Common Psychiatric Disorders	NIMH	2017-2021	\$58,392**	\$2,210,556
Morris & Cosgrove	Imaging Sex Differences in Smoking-Induced Dopamine Release via Novel PET Methods	NIDA	2015-2020	\$439,638	\$2,198,190
Nillni	PTSD-Related Neurobiological Mediators of Negative Pregnancy Outcomes	NICHD (K)	2017-2021	\$153,933	\$615,735
Pless Kaiser & Niles	A Randomized Pilot Trial of Tai Chi Compared to Wellness Education for Older Veterans	NIA	2018-2019	\$26,985	\$26,985
Ralevski	Effects of Allopregnanolone on Stress-Induced Craving	NIAAA	2017-2019	\$155,444	\$343,613
Scioli-Salter	Neurobiological Mediators of Self-regulatory and Reward-based Motivational Predictors of Exercise Maintenance in Chronic Pain and PTSD	NCCIH	2018-2021	\$15,000	\$157,500
Sippel	Neurocognitive Mechanisms of Poor Social Connection in PTSD	NIH/ Dartmouth CTSI	2018-2019	\$18,519	\$44,447
Sloan	Written Exposure Therapy for PTSD: A Randomized Noninferiority Trial	NIMH	2012-2019	\$0	\$1,149,000
Smith & Logue	The Impact of Traumatic Stress on the Methylome: Implications for PTSD	NIMH	2016-2020	\$559,082	\$2,479,996
Smith	Health Mechanisms and Outcomes in an Epidemiological Cohort of Vietnam Era Women Veterans	NIA	2016-2019	\$67,905	\$137,381
Taft	Trauma-Focused Partner Violence Intervention	NIH/Boston University CTSI	2017-2018	\$20,000	\$20,000
Wiltsey Stirman & Monson	Improving and Sustaining CPT for PTSD in Mental Health Systems	NIMH	2016-2019	\$584,763	\$1,615,257
Wiltsey Stirman (PI), Gutner (Site PI)	Leveraging Routine Clinical Materials and Mobile Technology to Assess CBT Quality	NIMH	2017-2021	\$681,178	\$2,607,817
Wolf	Administrative Supplement to Traumatic Stress and Accelerated Aging in DNA Methylation	NIA	2017-2018	\$52,545	\$52,545
Wolf	Traumatic Stress and Accelerated Aging in DNA Methylation	NIA	2016-2018	\$63,000	\$126,000
Zimmerman	Participatory System Dynamics for Evidence-based Addiction and Mental Healthcare	NIDA	2016-2018	\$221,005	\$397,000

BU SoM Boston University School of Medicine; CTSI Clinical and Translational Science Institute; K Career Development Award; NH-INBRE New Hampshire IDeA Network of Biomedical Research Excellence; NIA National Institute on Aging; NIAAA National Institute on Alcohol Abuse and Alcoholism; NICHD National Institute of Child Health and Human Development; NIDA National Institute on Drug Abuse; NIH National Institutes of Health; NIMH National Institute of Mental Health; NIMHD National Institute on Minority Health and Health Disparities; PGC Psychiatric Genomics Consortium

**Indicates FY2018 funds allocated to funded site PI.

***No direct funding provided to NCPTSD but in-kind support provided.

Department of Defense (DoD)

Principal Investigator	Research Title	Years	Current Funding	Total Funding
Chard & Marx	Psychometric Evaluation of the Clinician Administered PTSD Scale for DSM-5 (CAPS-5) and the PTSD Symptom Scale Interview for DSM-5 (PSSI-5) in an Active Duty and Military Veteran Sample	2018-2020	\$1,067,635	\$3,235,388
McLean & Rosen	Targeted Strategies to Accelerate Evidence-based Psychotherapies Implementation in Military Settings	2017-2021	\$1,834,162	\$8,265,060
McLean	Web-PE: Internet-delivered Prolonged Exposure Therapy for PTSD	2014-2018	\$495,000	\$1,979,473
Mitchell & Zafra Cooper	Eating Disorders in Veterans: Prevalence, Comorbidity, Risk, and Healthcare Use	2018-2021	\$529,281	\$1,463,890
Norman	Trauma Informed Guilt Reduction (TrIGR) Intervention	2015-2019	\$503,040	\$1,989,870
Rosen	PTSD Practitioner Registry: An Innovative Tracking, Dissemination and Support Tool for Providers in Military and Nonmilitary Settings	2014-2018	\$408,350	\$1,565,112
Shiner	Comparative Effectiveness of Psychotropic Medications for PTSD in Clinical Practice	2017-2020	\$343,956	\$1,160,375
Sloan	Brief Treatment for PTSD: Enhancing Treatment Engagement and Retention	2015-2019	\$0	\$2,226,872
Taft	Strength at Home Couples Program to Prevent Military Partner Violence	2015-2019	\$140,480	\$708,905
Wachen	Massed Cognitive Processing Therapy for Combat-related PTSD	2017-2020	\$745,216	\$3,262,817
White & Mackintosh	Brain Injury and Military Service as Factors for Alzheimer's Disease and Other Conditions	2015-2018	\$372,948	\$1,491,790
Woodward	Can a Canine Companion Modify Cardiac Autonomic Reactivity and Tone in PTSD	2014-2018	\$324,518	\$910,335

Other Non-VA Sources

Principal Investigator	Research Title	Funding Source	Years	Current Funding	Total Funding
Anticevic	Characterizing the Neuronal Mechanisms Behind Cognitive and Motivational Deficits in Psychiatric Disorders	Blackthorn Therapeutics	2016-2018	\$1,000,000	\$2,000,000
Averill	Brain Connectivity Networks and Predictors of Rapid Improvement in Suicidal Ideation Among Veterans	American Foundation for Suicide Prevention	2018-2020	\$40,000	\$90,000
Averill	Connectivity Networks Underlying Ketamine- Induced Improvements in Suicidal Ideation	Robert E. Leet and Clara Guthrie Patterson Trust for Mentored Clinical Research Award	2017-2019	\$45,000	\$45,000
Averill	Intrinsic Connectivity Networks and Cognitive Impairment in PTSD	Brain and Behavior Research Foundation	2016-2018	\$34,993	\$69,993
Cosgrove	Imaging Glucocorticoid and Neuronal Dysfunction in PTSD	Brain and Behavior Research Foundation	2017-2018	\$99,998	\$99,998
Cosgrove	The Dopamine Signature of Cannabis: Imaging Sex Differences	Naratil Pioneer Award	2017-2018	\$50,000	\$50,000
Duman	Behavioral Actions of GLYX-13 in Rodent Models of Cognitive Flexibility	Allergan	2016-2018	\$82,230	\$82,230
Duman	Cellular Mechanisms Underlying the Antidepressant Actions of GLYX013	Allergan	2016-2018	\$246,960	\$246,960

Appendix C: Fiscal Year 2018 Funding

(Other Non-VA Sources, continued)

Principal Investigator	Research Title	Funding Source	Years	Current Funding	Total Funding
Duman	Identification and Characterization of Novel Drug Targets for Depression	Tashio Pharmaceuticals	2016-2019	\$200,000	\$600,000
Esterlis	In Vivo and Postmortem Study of Synaptic Plasticity	Nancy Taylor Foundation	2015-2018	\$156,038	\$500,661
Feder & Pietrzak	A Randomized Controlled Trial of Internet CBT for PTSD in WTC Responders	CDC/NIOSH	2016-2019	\$499,912	\$1,499,736
Feder & Pietrzak	Neuroimaging of Resilience in World Trade Center Responders: A Focus on Emotional Processing, Reward and Social Cognition	CDC/NIOSH	2017-2021	\$599,086	\$2,398,856
Feder & Pietrzak	Biomarkers of Psychological Risk and Resilience in World Trade Center Responders	CDC/NIOSH	2012-2018	\$995,911	\$3,873,351
Galovski & Street	Women Veterans Network (WoVeN)	Walmart Foundation	2017-2018	\$219,051	\$469,392
Galovski & Street	Women Veterans Network (WoVeN) - Phase 2	Walmart Foundation	2018-2020	\$62,011	\$250,782
Hu & Marx	Mining Audio Cues from PTSD Interviews	MITRE Innovation Award	2016-2099	\$100,000	\$100,000
Kaye	Circuit of Mechanisms of a Pupillary Biomarker for Stress-Induced Hyperarousal	Brain and Behavior Research Foundation	2019-2021	\$0	\$70,000
Kelmendi	Role of MDMA on Amygdala and Prefrontal Cortex on PTSD	Brain and Behavior Research Foundation	2016-2018	\$35,000	\$70,000
Krystal & Abdallah	Examining the Impact of Rapamycin on Ketamine's Antidepressant Effects	Pfeiffer Foundation	2015-2019	\$167,000	\$500,000
Levy	Decision Making Under Uncertainty Across the Lifespan: Cognitive, Motivational and Neural Bases	NSF	2018-2021	\$224,771	\$696,038
McCaslin	A Pilot Study of Digital Cognitive Behavioral Therapy for Veterans with Insomnia and Comorbid Psychopathology	Big Health, Inc	2017-2019	\$26,959	\$26,959
Monson & Wiltsey Stirman	Improving and Sustaining Clinician Use of CPT	Canadian Institutes of Health Research	2014-2018	\$182,000	\$728,215
Petrakis	Effects of Progesterone on Stress-induced Craving in PTSD and AUD	Brain and Behavior Research Foundation	2016-2018	\$99,390	\$99,390
Sanacora	An Open-label Long-term Safety and Efficacy Study of Intranasal Esketamine in Treatment- Resistant Depression (Sustain 2)	Janssen Research & Development	2015-2018	\$301,767	\$900,290
Sanacora	Electroconvulsive Therapy Versus Ketamine for Severe Resistant Depression	PCORI	2017-2021	\$0	\$1,500,000
Sanacora	Exploring the Role of Glial Mediated Glutamate Clearance in Stress Sensitivity and Resiliency	Brain and Behavior Research Foundation	2015-2018	\$0	\$99,819
Sanacora	Randomized, Double-blind Multicenter, Active- controlled Study to Evaluate the Efficacy, Safety and Tolerability of Intranasal Esketamine Plus an Oral Antidepressant in Elderly Subjects with Treatment Resistant Depression (Transform 3)	Janssen Res & Dev, LLC	2015-2018	\$58,811	\$222,630
Sareen (PI), Pietrzak (Site PI)	Defining the Longitudinal Course, Outcomes, and Treatment Needs of Vulnerable Canadians with Posttraumatic Stress Disorder	Canadian Institutes of Health Research	2015-2022	\$340,868**	\$2,386,073
Taft	Implementation of VA Rollout of Strength at Home	Bob Woodruff Foundation	2017-2019	\$165,673	\$452,445

(Other Non-VA Sources, continued)

Principal Investigator	Research Title	Funding Source	Years	Current Funding	Total Funding
Vogt	The Veterans Metrics Initiative: Linking Program Components to Post-military Well-being	Consortium of Public and Private Funding, including VA HSR&D	2015-2020	\$1,341,242	\$5,914,960
Wolf	The Utility of MMPI-2 RF in Informing VA Pain Clinic Care	University of Minnesota Press, Test Division	2016-2018	\$0	\$24,000

CDC Centers for Disease Control; NIOSH National Institute for Occupational Safety and Health; NSF National Science Foundation; OGP Office of Government-wide Policy; PCORi Patient-Centered Outcomes Research Institute

**Indicates FY2018 funds allocated to funded site PI.

Projects Pending Funding

Principal Investigator	Research Title	Funding Source	Years	Total Funding
Bovin	From Screening to Treatment: Mapping Access to Care Pathways for Veterans Who Screen Positive for PTSD	VA HSR&D	2019-2020	\$98,767
Cook	Peer Online Motivational Interviewing for Sexual and Gender Minority Male Survivors	PCORI	2019-2022	\$1,416,757
Daskalakis (PI), Miller (Site PI)	Causal Gene Inference and Functional Genomics in PTSD	NIH NIMH	2019-2024	\$263,383
Feder (PI) , Pietrzak (Site PI)	Digital Cognitive-Emotional Training for Depressed WTC Responders: A Randomized Controlled Trial	CDC/NIOSH	2018-2021	\$1,490,964
Galovski & Kehle- Forbes	Balancing Flexibility and Fidelity: Integrating a Case Formulation Approach with Cognitive Processing Therapy for PTSD to Improve Treatment Outcomes for Veterans	VA HSR&D	2018-2022	\$1,099,343
Galovski & Street	Women Veterans Network (WoVeN) - Extend Funding	Bob Woodruff Foundation	2019-2020	\$152,433
Galovski & Street	Women Veterans Network (WoVeN) - Train the Trainer Program	Fisher House Newman's Own Award	2018-2019	\$50,000
Gutner	Increasing Reach of Evidence-Based Psychotherapies in CBOCs: Identifying Needs and Strategies for Scale Out	VA HSR&D	2019-2019	\$98,534
Harpaz-Rotem & Pietrzak	Fear Reversal Learning in Combat-Related PTSD: A Multi- Modal fMRI-PET Approach	VA CSR&D	2018-2023	\$1,100,000
Hayes	Fear Generalization and Hippocampal Subfields in PTSD	Brain and Behavior Foundation	2018-2020	\$70,000
Hayes	Neuroimaging and Molecular Markers of AD and Neurodegenerative Disease after Concussion	NIH NIA	2018-2023	\$1,544,788
Holtzheimer & Wylie	Understanding the Relationship between Depression and Fatigue in TBI	VA CSR&D	2019-2022	\$600,000
lverson	Addressing Intimate Partner Violence among Women Veterans: Evaluating the Impact and Effectiveness of VHA's Response	VA HSR&D	2019-2023	\$1,097,111
Kehle-Forbes & Galovski	Evaluation of a Self-Management Program for Completers of Trauma-Focused Therapy	NIH NIMH	2018-2021	\$450,000
Mackintosh	Delivering Anger Management Treatment through a Web-based Intervention: Determining Intervention Efficacy and Impact of Coaching Components	VA RR&D	2019-2023	\$1,097,431
Marx	Decreasing Suicide Risk among Service Members with Posttraumatic Stress	DoD	2019-2021	\$1,371,299
Meredith & Sloan	Embedding Written Exposure Therapy into Collaborative Care for PTSD in Primary Care	NIH NIMH	2019-2023	\$3,717,747
Miller, K.	Characterization of Sleep with Trauma Nightmares using Ambulatory Sleep Measurement	VA CSR&D (CDA)	2019-2022	\$767,040

(Projects Pending Funding, continued)

Principal Investigator	Research Title	Funding Source	Years	Total Funding
Miller, M.	Leveraging Precision-Medicine to Enhance the Efficacy of Treatments for Posttraumatic Stress Disorder	Ellison Foundation	2019-2020	\$190,000
Mitchell	Eating Disorders among Veterans: Risk, Resilience, and Service Use	VA HSR&D	2018-2021	\$556,818
Nixon & Galovski	Improved PTSD Treatment Using Case Formulation: A Randomized Trial	National Health and Medical Research Council (Australian Government)	2019-2023	\$633,503
Petrakis	Kappa Opioid Receptor Antagonist for the Treatment of Alcohol Use Disorder and Comorbid PTSD - Planning Grant	Pharmacotherapies for Alcohol and Substance Use Disorders Consortium	2018-2020	\$576,152
Scioli-Salter & Rasmusson	Potential Neurohumoral Biomarkers Underlying Exercise Augmentation of Cognitive Processing Therapy in a Chronic Pain and PTSD Veteran Population	VA CSR&D	2019-2023	\$1,643,235
Shiner	Evaluating the Effect of PTSD and Evidence-Based PTSD Treatment on Death by Suicide	DoD	2019-2021	\$2,762,519
Sloan	An Efficient Exposure-Based Treatment for PTSD Compared to Prolonged Exposure: A Noninferiority Trial	VA CSR&D	2019-2024	\$1,495,514
Sullivan	Neural Metabolic Stress in PTSD	NIH NIMH	2018-2022	\$652,070
Taylor (PI), McLean (Site PI)	Prevalence and Impact of Sleep Disorders in Service Members Receiving Treatment for PTSD	DoD	2018-2023	\$6,387,722
Wolf	Neurobiological Correlates of Accelerated Cellular Aging	NIH NIA	2018-2020	\$346,500
Wolf	Curcumin as a Novel Intervention for PTSD-Related Inflammation: A Magnetic Resonance Spectroscopy Study	One Mind Foundation	2018-2021	\$250,000
Zimmerman	Participatory System Dynamics vs. Audit and Feedback: A Cluster Randomized Trial of Mechanisms of Implementation Change to Expand Reach of Evidence- based Addiction and Mental Health Care	NIH NIDA	2019-2023	\$3,170,025
Zimmerman	Participatory System Dynamics vs. Usual Quality Improvement: Cost-Effectiveness of Staff Engagement in VA Data Modeling Simulations to Implement Timely Veteran Access to High-Quality Mental Health Care	VA HSR&D	2018-2022	\$1,099,699

CDA Career Development Award; CDC Centers for Disease Control; CSP Cooperative Studies Program; CSR&D Clinical Science Research and Development Service; DoD Department of Defense; HSR&D Health Services Research and Development Service; NIA National Institute on Aging; NIDA National Institute on Drug; NIH National Institutes of Health; NIMH National Institute of Mental Health; NIOSH National Institute for Occupational Safety and Health; PCORI Patient-Centered Outcomes Research Institute; VA Veterans Affairs

Appendix D: Fiscal Year 2018 Publications

- Abdallah, C., Averill, C. L., Salas, R., Averill, L., Baldwin, P., Krystal, J. H., Mathew, S., & Mathalon, D. (2017). Prefrontal connectivity and glutamate transmission: Relevance to depression pathophysiology and ketamine treatment. *Biological Psychiatry: Cognitive Neuroscience and Neuroimaging*, 2, 566-574. doi:10.1016/j.bpsc.2017.04.006
- Abdallah, C., Averill, L., Akiki, T., Raza, M., Averill, C. L., Gomaa, H., Adikey, A., & Krystal, J. H. (2018). The neurobiology and pharmacotherapy of posttraumatic stress disorder. *Annual Review of Pharmacology and Toxicology*. doi:10.1146/annurevpharmtox-010818-021701
- Abdallah, C., De Feyter, H. M., Averill, L., Jiang, L., Averill, C. L., Chowdhury, G., Purohit, P., de Graaf, R. A., Esterlis, I., Juchem, C., Pittman, B. P., Krystal, J. H., Rothman, D., Sanacora, G., & Mason, G. F. (2018). The effects of ketamine on prefrontal glutamate neurotransmission in healthy and depressed subjects. *Neuropsychopharmacology*, 43, 2154-2160. doi:10.1038/s41386-018-0136-3
- Abdallah, C., Dutta, A., Averill, C. L., McKie, S., Akiki, T., Averill, L., & Deakin, W. (2018). Ketamine, but not the NMDA receptor antagonist lanicemine, increases prefrontal connectivity in depressed patients. *Chronic Stress*. doi:10.1177/2470547018796102
- Adams, T., Kelmendi, B., Brake, A., Gruner, P. A., Badour, C. L., & Pittenger, C. (2018). The role of stress in the pathogenesis and maintenance of obsessive-compulsive disorder. *Chronic Stress*. doi:10.1177/2470547018758043
- Akiki, T., Averill, C. L., Wrocklage, K. M., Scott, J. C., Averill, L., Schweinsburg, B., Alexander-Bloch, A., Martini, B., Southwick, S. M., Krystal, J. H., & Abdallah, C. (2018). Default mode network abnormalities in posttraumatic stress disorder: A novel network-restricted topology approach. *NeuroImage, 176*, 489-498. doi:10.1016/j.neuroimage.2018.05.005
- Andersen, A., Pietrzak, R. H., Kranzler, H., Ma, L., Zhou, H., Liu, X., Kramer, J., Kuperman, S., Edenberg, H., Nurnberger, J., Rice, J., Tischfield, J., Goate, A., Foroud, T., Meyers, J., Porjesz, B., Dick, D., Hesselbrock, V., Boerwinkle, E., Southwick, S. M., Krystal, J. H., Weissman, M., Levinson, D., Potash, J., Gelernter, J., & Han, S. (2017). Polygenic scores for major depressive disorder and risk of alcohol dependence. JAMA Psychiatry, 74, 1153-1160. doi:10.1001/jamapsychiatry.2017.2269
- Arditte Hall, K., Bartlett, B., Iverson, K. M., & Mitchell, K. S. (2018). Eating disorder symptoms in female veterans: The role of childhood, adult, and military trauma exposure. *Psychological Trauma: Theory, Research, Practice, and Policy, 10*, 345-351. doi:10.1037/tra0000301

- Arditte Hall, K., Osterberg, T. J., Orr, S. P., & Pineles, S. L. (2018). The cardiovascular consequences of autonomic nervous system dysregulation in PTSD. In G. Pinna (Ed.), *Facilitating resilience after trauma* (pp. 127-156). Hauppauge, NY: Nova Science Publishers.
- Averill, C. L., Averill, L., Wrocklage, K. M., Scott, J. C., Akiki, T., Schweinsburg, B., Southwick, S. M., Krystal, J. H., & Abdallah, C. (2018). Altered white matter diffusivity of the cingulum angular bundle in PTSD. *Molecular Neuropsychiatry*, 4, 75-82. doi:10.1159/000490464
- Averill, C. L., Satodiya, R., Scott, J. C., Wrocklage, K. M., Schweinsburg, B., Averill, L., Akiki, T., Amoroso, T., Southwick, S. M., Krystal, J. H., & Abdallah, C. (2017). Posttraumatic stress disorder and depression symptom severities are differentially associated with hippocampal subfield volume loss in combat veterans. *Chronic Stress*. doi:10.1177/2470547017744538
- 12. Averill, L., Averill, C. L., Kelmendi, B., Abdallah, C., & Southwick, S. M. (2018). Stress response modulation underlying the psychobiology of resilience. *Current Psychiatry Reports, 20*, 27. doi:10.1007/s11920-018-0887-x
- Babson, K. A., Wong, A. C., Morabito, D. M., & Kimerling, R. (2018). Insomnia symptoms among female veterans: Prevalence, risk factors, and the impact on psychosocial functioning and health care utilization. *Journal of Clinical Sleep Medicine*, 14, 931-939. doi:10.5664/jcsm.7154
- Back, S., Flanagan, J., Jones, J., Augur, I., Peterson, A., Young-McCaughan, S., Shirley, D., Henschel, A., Joseph, J., Litz, B., Hancock, A., Roache, J., Mintz, J., Wachen, J. S., Keane, T. M., & Brady, K. (2018). Doxazosin for the treatment of co-occurring PTSD and alcohol use disorder: Design and methodology of a randomized controlled trial in military veterans. *Contemporary Clinical Trials, 73*, 8-15. doi:10.1016/j.cct.2018.08.009
- Balderrama-Durbin, C., Erbes, C., Polusny, M., & Vogt, D. (2018). Psychometric evaluation of a measure of intimate partner communication during deployment. *Journal of Family Psychology, 32*, 31-41. doi:10.1037/fam0000382
- Banducci, A. N., Bonn-Miller, M., Timko, C., & Rosen, C. S. (2018). Associations between residential treatment length, PTSD, and outpatient healthcare utilization among veterans. *Psychological Services*, *15*, 529-535. doi:10.1037/ser0000204
- 17. Bannister, J., **Colvonen, P.**, Angkaw, A., & **Norman, S. B.** (2018). Differential relationships of guilt and shame on posttraumatic stress disorder among veterans. *Psychological Trauma: Theory, Research, Practice, and Policy.* doi:10.1037/tra0000392
- Bartlett, B., Iverson, K. M., & Mitchell, K. S. (2018). Intimate partner violence and disordered eating among male and female veterans. *Psychiatry Research*, *260*, 98-104. doi:10.1016/j. psychres.2017.11.056

- Baumann, A., Cabassa, L., & Wiltsey Stirman, S. (2017). Adaptation in implementation science. In R. C. Brownson, G. A. Colditz, & E. K. Proctor (Eds.), *Dissemination and implementation research in health: Translating science to practice (2nd ed.)* (pp. 285-300). New York, NY: Oxford University Press.
- Beagley, M. C., Peterson, Z. D., Strasshofer, D. R., & Galovski, T. E. (2018). Sex differences in posttraumatic stress and depression in police officers following exposure to violence in Ferguson: The moderating effect of empathy. *Policing: An International Journal of Police Strategies & Management, 41*, 623-635. doi:10.1108/ PIJPSM-01-2017-0007
- 21. Beckman, K., **Shipherd, J. C.**, Simpson, T., & Lehavot, K. (2018). Military sexual assault in transgender veterans: Results from a nationwide survey. *Journal of Traumatic Stress*, *31*, 181-190. doi:10.1002/jts.22280
- 22. Bell, M. E., Dardis, C., Vento, S. A., & Street, A. E. (2018). Victims of sexual harassment and assault in the military: Understanding risks and promoting recovery. *Military Psychology, 30*, 219-228. doi:10.1037/mil0000144
- Ben-Ezra, M., Karatzias, T., Hyland, P., Brewin, C. R., Cloitre, M., Bisson, J. I., Roberts, N. P., Lueger-Schuster, B., & Shevlin, M. (2018). Posttraumatic stress disorder (PTSD) and complex posttraumatic stress disorder (CPTSD) as per ICD-11 proposals: A population study in Israel. *Depression and Anxiety*, 35, 264-274. doi:10.1002/da.22723
- Blonigen, D., Manfredi, L., Heinz, A. J., Bi, X., Suarez, P., Nevedal, A., Vashi, A., Timko, C., & Wagner, T. (2018). Reducing frequent utilization of psychiatric emergency services among veterans while maintaining quality of care. *Psychiatric Services*, 69, 438-447. doi:10.1176/appi.ps.201700288
- Bovin, M. J., Black, S. K., Rodriguez, P., Lunney, C. A., Kleiman, S., Weathers, F. W., Schnurr, P. P., Spira, J. L., Keane, T. M., & Marx, B. P. (2018). Development and validation of a measure of PTSD-related functional impairment: The Inventory of Psychosocial Functioning. *Psychological Services*, 15, 216-229. doi:10.1037/ser0000220
- Brailey, K., Mills, M., Marx, B. P., Proctor, S., Seal, K., Spiro, A., Ulloa, E., & Vasterling, J. J. (2018). Prospective examination of early associations of Iraq War zone deployment, combat severity, and posttraumatic stress disorder with new incident medical diagnoses. *Journal of Traumatic Stress*, 31, 102-113. doi:10.1002/jts.22264
- Brewin, C. R., Cloitre, M., Hyland, P., Shevlin, M., Maercker, A., Bryant, R., Humayun, A., Jones, L., Kagee, A., Rousseau, C., Somasundaram, D., Suzuki, Y., Wessely, S., van Ommeren, M., & Reed, G. (2017). A review of current evidence regarding the ICD-11 proposals for diagnosing PTSD and complex PTSD. *Clinical Psychology Review, 58*, 1-15. doi:10.1016/j.cpr.2017.09.001
- Brief, D., Solhan, M., Rybin, D., Enggasser, J., Rubin, A., Roy, M., Helmuth, E., Schreiner, A., Heilman, M., Vittorio, L., Rosenbloom, D., & Keane, T. M. (2018). Web-based alcohol intervention for veterans: PTSD, combat exposure, and alcohol outcomes. *Psychological Trauma: Theory, Research, Practice, and Policy, 10*, 154-162. doi:10.1037/tra0000281
- Broder-Fingert, S., Walls, M., Augustyn, M., Beidas, R., Mandell, D., Wiltsey Stirman, S., Silverstein, M., & Feinberg, E. (2018). A hybrid type I randomized effectiveness-implementation trial of patient navigation to improve access to services for children with autism spectrum disorder. *BMC Psychiatry, 18*, 1-10. doi:10.1186/s12888-018-1661-7

- Brooks, H., Kichuk, S., Adams, T., Kelmendi, B., Monahan, S., Wasylink, S., Pittenger, C., & Hampson, M. (2018). Developing image sets for inducing obsessive-compulsive checking symptoms. *Psychiatry Research*, *265*, 249-255. doi:10.1016/j. psychres.2018.04.035
- Brownlow, J. A., Zitnik, G. A., McLean, C. P., & Gehrman, P. R. (2018). The influence of deployment stress and life stress on post-traumatic stress disorder (PTSD) diagnosis among military personnel. *Journal of Psychiatric Research*, *103*, 26-32. doi:10.1016/j.jpsychires.2018.05.005
- Byrne, S., Krystal, J. H., Rosenheck, R. A., Vessicchio, J., & Pietrzak, R. H. (2017). Correlates of nonimprovement to pharmacotherapy for chronic, antidepressant-resistant, military service-related posttraumatic stress disorder: Insights from the Veterans Affairs Cooperative Study No. 504. *Journal* of Clinical Psychopharmacology, 37, 717-721. doi:10.1097/ JCP.000000000000777
- Carleton, R. N., Afifi, T. O., Turner, S., Taillieu, T., Duranceau, S., LeBouthillier, D. M., Sareen, J., Ricciardelli, R., MacPhee, R. S., Groll, D., Hozempa, K., Brunet, A., Weekes, J. R., Griffiths, C. T., Abrams, K. J., Jones, N. A., Beshai, S., Cramm, H. A., Dobson, K. S., Hatcher, S., **Keane, T. M.**, & Stewart, S. H. (2018). Mental disorder symptoms among public safety personnel. *The Canadian Journal* of *Psychiatry*, 63, 54-64. doi:10.1177/0706743717723825
- Carlson, E. B., Waelde, L. C., Palmieri, P. A., Macia, K. S., Smith, S. R., & McDade-Montez, E. (2018). Development and validation of the Dissociative Symptoms Scale. *Assessment, 25*, 84-98. doi:10.1177/1073191116645904
- Castro-Chapman, P. L., Orr, S. P., Berg, J., Pineles, S. L., Yanson, J., & Salomon, K. (2018). Heart rate reactivity to trauma-related imagery as a measure of PTSD symptom severity: Examining a new cohort of veterans. *Psychiatry Research, 261*, 574-580. doi:10.1016/j.psychres.2018.01.024
- Chang, C., Kaczkurkin, A. N., McLean, C. P., & Foa, E. B. (2018). Emotion regulation is associated with PTSD and depression among female adolescent survivors of childhood sexual abuse. *Psychological Trauma: Theory, Research, Practice, and Policy, 10*, 319-326. doi:10.1037/tra0000306
- Chekroud, A. M., Foster, D., Zheutlin, A. B., Gerhard, D. M., Roy, B., Koutsouleris, N., Chandra, A., Esposti, M. D., Subramanyan, G., Gueorguieva, R., Paulus, M., & **Krystal, J. H.** (2018). Predicting barriers to treatment for depression in a U.S. national sample: A cross-sectional, proof-of-concept study. *Psychiatric Services, 69*, 927-934. doi:10.1176/appi.ps.201800094
- Chekroud, S. R., Gueorguieva, R., Zheutlin, A. B., Paulus, M., Krumholz, H. M., Krystal, J. H., & Chekroud, A. M. (2018). Association between physical exercise and mental health in 1.2 million individuals in the USA between 2011 and 2015: A cross-sectional study. *Lancet Psychiatry*, *9*, 739-746. doi:10.1016/ S2215-0366(18)30227-X
- Ciarleglio, M., Aslan, M., Proctor, S., Concato, J., Ko, J., Pless Kaiser, A., & Vasterling, J. J. (2018). Associations of stress exposures and social support with long-term mental health outcomes among U.S. Iraq War veterans. *Behavior Therapy*, 49, 653-667. doi:10.1016/j.beth.2018.01.002
- 40. **Colvonen, P.**, Drummond, S., Angkaw, A., & **Norman, S. B.** (2018). Piloting cognitive–behavioral therapy for insomnia integrated with prolonged exposure. *Psychological Trauma: Theory, Research, Practice, and Policy*. doi:10.1037/tra0000402

- Colvonen, P., Straus, L., Stepnowsky, C., McCarthy, M., Goldstein, L., & Norman, S. B. (2018). Recent advancements in treating sleep disorders in co-occurring PTSD. *Current Psychiatry Reports*, 20, 48. doi:10.1007/s11920-018-0916-9
- 42. **Cook, J.** (2017). Engaging a public audience: Social justice advocacy and dissemination of trauma science. *Journal of Trauma & Dissociation, 19*, 131-135. doi:10.1080/15299732.2018 .1380491
- 43. **Cook, J.**, Anderson, C., Simiola, V., & Ellis, A. (2018). Top ten questions male sexual abuse survivors want to know from health care research. *Journal of Aggression, Maltreatment & Trauma, 27*, 867-882. doi:10.1080/10926771.2018.1446481
- Cook, J., Simiola, V., McCarthy, E., Ellis, A., & Wiltsey Stirman, S. (2018). Use of reflective journaling to understand decision making regarding two evidence-based psychotherapies for PTSD: Practice implications. *Practice Innovations*, *3*, 153-167. doi:10.1037/pri0000070
- Coplan, J. D., Lu, D., El Sehamy, A., Tang, C., Jackowski, A. P., **Abdallah, C.**, Nemeroff, C. B., Owens, M. J., Mathew, S. J., & Gorman, J. M. (2018). Early life stress associated with increased striatal n-acetyl-aspartate: Cerebrospinal fluid corticotropin-releasing factor concentrations, hippocampal volume, body mass and behavioral correlates. *Chronic Stress*. doi:10.1177/2470547018768450
- Coplan, J. D., Webler, R., Gopinath, S., Abdallah, C., & Mathew, S. J. (2018). Neurobiology of the dorsolateral prefrontal cortex in GAD: Aberrant neurometabolic correlation to hippocampus and relationship to anxiety sensitivity and IQ. *Journal of Affective Disorders, 229*, 1-13. doi:10.1016/j.jad.2017.12.001
- 47. Creech, S. K., Benzer, J., Ebalu, T., Murphy, C. M., & Taft, C.
 T. (2018). National implementation of a trauma-informed intervention for intimate partner violence in the Department of Veterans Affairs: First year outcomes. *BMC Health Services Research*, *18*, 582. doi:10.1186/s12913-018-3401-6
- Currier, J. M., Farnsworth, J. K., Drescher, K., & McCormick, W. H. (2018). Moral injury and resilience in the military. In K. H. Thomas & D. L. Albright (Eds.), *Bulletproofing the psyche: Preventing mental health problems in our military and veterans* (pp. 76-92). Santa Barbara, CA: Praeger.
- Dardis, C., Dichter, M., & Iverson, K. M. (2018). Empowerment, PTSD and revictimization among women who have experienced intimate partner violence. *Psychiatry Research*, 266, 103-110. doi:10.1016/j.psychres.2018.05.034
- Dardis, C., Vento, S., Gradus, J. L., & Street, A. E. (2018). Labeling of deployment sexual harassment experiences among male and female veterans. *Psychological Trauma: Theory, Research, Practice, and Policy, 10*, 452-455. doi:10.1037/ tra0000330
- Davidson, T., Moreland, A., Bunnell, B. E., Winkelmann, J., Hamblen, J. L., & Ruggiero, K. J. (2018). Reducing stigma in mental health through digital storytelling. In B. Canfield & H. Cunningham (Eds.), *Deconstructing stigma in mental health* (pp. 169-183). Hershey, PA: IGI Global. doi:10.4018/978-1-5225-3808-0.ch007
- DePhilippis, D., Petry, N. M., Bonn-Miller, M., Rosenbach, S. B., & McKay, J. R. (2018). The national implementation of contingency management (CM) in the Department of Veterans Affairs: Attendance at CM sessions and substance use outcomes. Drug and Alcohol Dependence, 185, 367-373. doi:10.1016/j. drugalcdep.2017.12.020

- Dichtel, L. E., Lawson, E. A., Schorr, M., Meenaghan, E., Paskal, L. M., Eddy, K. T., Pinna, G., Nelson, M., **Rasmusson, A. M.**, Klibanski, A., & Miller, K. K. (2017). Neuroactive steroids and affective symptoms in women across the weight spectrum. *Neuropsychopharmacology*, *43*, 1436-1444. doi:10.1038/ npp.2017.269
- 54. Dichter, M. E., Butler, A., Bellamy, S., Medvedeva, E., Roberts, C. B., & Iverson, K. M. (2017). Disproportionate mental health burden associated with past-year intimate partner violence among women receiving care in the Veterans Health Administration. *Journal of Traumatic Stress*, 30, 555-563. doi:10.1002/jts.22241
- Dichter, M., Sorrentino, A., Haywood, T., Bellamy, S., Medvedeva, E., Roberts, C., & Iverson, K. M. (2018). Women's healthcare utilization following routine screening for past-year intimate partner violence in the Veterans Health Administration. *Journal* of General Internal Medicine, 33, 936-941. doi:10.1007/s11606-018-4321-1
- Doran, J., Pietrzak, R. H., Hoff, R., & Harpaz-Rotem, I. (2017). Psychotherapy utilization and retention in a national sample of veterans with PTSD. *Journal of Clinical Psychology*, 73, 1259-1279. doi:10.1002/jclp.22445
- 57. **Duman, R.** (2018). Ketamine and rapid acting antidepressants: A new era in the battle against depression and suicide. *F1000Research.* doi:10.12688/f1000research.14344.1
- Duncan, L. E., Ratanatharathorn, A., Aiello, A. E., Almli, L. M., Amstadter, A. B., Ashley-Koch, A., Baker, D. G., Beckham, J., Bierut, L. J., Bisson, J., Bradley, B., Chen, C. Y., Dalvie, S., Farrer, L. A., Galea, S., Garrett, M. E., **Gelernter, J.**, Guffanti, G., Hauser, M. A., Johnson, E. O., Kessler, R. C., Kimbrel, N. A., King, A., Koen, N., Kranzler, H. R., **Logue, M. W.**, Maihofer, A., Martin, A. R., **Miller, M. W.**, Morey, R., Nugent, N. R., Rice, J. P., Ripke, S., Roberts, A. L., Saccone, N. L., Smoller, J. W., Stein, D. J., Stein, M. B., Sumner, J. A., Uddin, M., Ursano, R. J., Wildman, D. E., Yehuda, R., Zhao, H., Daly, M. J., Liberzon, I., Ressler, K. J., Nievergelt, C., & Koenen, K. C. (2018). Largest GWAS of PTSD (n=20,070) yields genetic overlap with schizophrenia and sex differences in heritability. *Molecular Psychiatry, 23*, 666-673. doi:10.1038/mp.2017.77
- El-Gabalawy, R., Blaney, C., Tsai, J., Sumner, J., & Pietrzak, R. H. (2018). Physical health conditions associated with full and subthreshold PTSD in U.S. military veterans: Results from the National Health and Resilience in Veterans Study. *Journal of Affective Disorders, 227*, 849-853. doi:10.1016/j.jad.2017.11.058
- 60. Ellis, A., Simiola, V., Brown, L., Courtois, C., & **Cook, J.** (2018). The role of evidence-based therapy relationships on treatment outcome for adults with trauma: A systematic review. *Journal of Trauma & Dissociation, 19*, 185-213. doi:10.1080/15299732.2017 .1329771
- Esterlis, I., DellaGioia, N., Pietrzak, R. H., Matuskey, D., Nabulsi, N., Abdallah, C., Yang, J., Pittenger, C., Sanacora, G., Krystal, J. H., Parsey, R., Carson, R., & DeLorenzo, C. (2018). Ketamine-induced reduction in mGluR5 availability is associated with an antidepressant response: An [11C]ABP688 and PET imaging study in depression. *Molecular Psychiatry, 23*, 824-832. doi:10.1038/mp.2017.58
- 62. **Feingold, Z., Fox-Galalis, A. B.**, & **Galovski, T. E.** (2017). Effectiveness of evidence-based psychotherapy for posttraumatic distress within a jail diversion program. *Psychological Services, 14*, 543-548. doi:10.1037/ser0000156

- Flanagan, J., Sippel, L. M., Wahlquist, A., Moran-Santa Maria, M., & Back, S. (2018). Augmenting Prolonged Exposure therapy for PTSD with intranasal oxytocin: A randomized, placebocontrolled pilot trial. *Journal of Psychiatric Research*, 98, 64-69. doi:10.1016/j.jpsychires.2017.12.014
- Foa, E. B., McLean, C. P., Zandberg, L. J., Zang, Y., Asnaani, A., Benhamou, K., Rosenfield, D., Campbell, H., Francis, J., Hanson, B. S., Lillard, I. J., Patterson, T. J., Scott, V., Weber, C., Wise, J. E., Zamora, C., Mintz, J., Young-McCaughan, S., Peterson, A. L., & STRONG STAR Consortium (2017). The implementation of Prolonged Exposure: Design of a multisite study evaluating the usefulness of workshop with and without consultation. *Contemporary Clinical Trials, 61*, 48-54. doi:10.1016/j. cct.2017.07.018
- Foa, E., McLean, C. P., Zang, Y., Rosenfield, D., Yadin, E., Yarvis, J. S., Mintz, J., Young-McCaughan, S., Borah, E. V., Dondanville, K. A., Fina, B. A., Hall-Clark, B. N., Lichner, T., Litz, B. T., Roache, J., Wright, E. C., & Peterson, A. L. (2018). Effect of Prolonged Exposure therapy delivered over 2 weeks vs 8 weeks vs Present-Centered Therapy on PTSD symptom severity in military personnel: A randomized clinical trial. *JAMA*, *319*, 354-364. doi:10.1001/jama.2017.21242
- Fogaca, M. V., de Campos, A. D., Coelho, L. D., **Duman, R.**, & Guimaracs, F. S. (2018). Anxiolytic effects of cannabidiol in chronically stressed mice are mediated by the endocannabinoid system: Role of neurogenesis and dendritic remodeling. *Neuropharmacology*, *135*, 22-33. doi:10.1016/j. neuropharm.2018.03.001
- Fox, A. B., Smith, B. N., & Vogt, D. (2018). How and when does mental illness stigma impact treatment seeking? Longitudinal examination of relationships between anticipated and internalized stigma, symptom severity, and mental health service use. *Psychiatry Research, 268*, 15-20. doi:10.1016/j. psychres.2018.06.036
- Frankfurt, S., DeBeer, B., Morissette, S., Kimbrel, N. A., La Bash, H., & Meyer, E. C. (2018). Mechanisms of moral injury following military sexual trauma and combat in post-9/11 U.S. war veterans. *Frontiers in Psychiatry*, *9*, 520-530. doi:10.3389/ fpsyt.2018.00520
- Fuehrlein, B., Kachadourian, L., DeVylder, E., Trevisan, L., Potenza, M., Krystal, J. H., Southwick, S. M., & Pietrzak, R. H. (2018). Trajectories of alcohol consumption in U.S. military veterans: Results from the National Health and Resilience in Veterans Study. *The American Journal on Addictions, 27*, 383-390. doi:10.1111/ajad.12731
- 70. **Galovski, T. E.**, Peterson, Z., & **Fox-Galalis, A. B.** (2018). Trajectories of posttraumatic stress and depression in police and community members following the violence during civil unrest in Ferguson, Missouri. *American Journal of Community Psychology*. doi:10.1002/ajcp.12273
- Gelkopf, M., Lapid Pickman, L., Grinapol, S., Werbeloff, N., Carlson, E. B., & Greene, T. (2017). Peritraumatic reaction courses during war: Gender, serious mental health illness, and exposure. *Psychiatry: Interpersonal and Biological Processes*, 80, 382-398. doi:10.1080/00332747.2017.1286893
- George, J., Pittenger, C., Kelmendi, B., Lohr, J. M., & Adams, T. (2018). Disgust sensitivity mediates the effects of race on contamination aversion. *Journal of Obsessive-Compulsive and Related Disorders*, 19, 72-76. doi:10.1016/j.jocrd.2018.08.002

- 73. Gerber, M. R., **King, M. W., Iverson, K. M., Pineles, S. L.**, & Haskell, S. G. (2018). Association between mental health burden and coronary artery disease in U.S. women veterans over 45: A national cross-sectional study. *Journal of Women's Health, 27*, 238-244. doi:10.1089/jwh.2017.6328
- 74. German, R., Frankel, S., Adler, A., Wiltsey Stirman, S., & Creed, T. (2017). Testing a web-based, trained-peer model to build capacity for evidence-based practices in community mental health systems. *Psychiatric Services*, 69, 286-292. doi:10.1176/ appi.ps.201700029
- 75. Gilbar, O., Hyland, P., **Cloitre, M.**, & Dekel, R. (2018). ICD-11 complex PTSD among Israeli male perpetrators of intimate partner violence: Construct validity and risk factors. *Journal of Anxiety Disorders, 54*, 49-56. doi:10.1016/j.janxdis.2018.01.004
- 76. Glassman, L. H., Mackintosh, M. A., Talkovsky, A., Wells, S. Y., Walter, K. H., Wickramasinghe, I., & Morland, L. A. (2017). Quality of life following treatment for PTSD: Comparison of videoconferencing and in-person modalities. *Journal of Telemedicine and Telecare*. doi:10.1177/1357633X17740610
- Glick, D. M., Cook, J., Moye, J., & Pless Kaiser, A. (2018). Assessment and treatment considerations for posttraumatic stress disorder at end of life. *American Journal of Hospice and Palliative Medicine*, 35, 1133-1139. doi:10.1177/1049909118756656
- Goldstein, K. M., Vogt, D., Hamilton, A., Frayne, S., Gierisch, J., Blakeney, J., Sadler, A., Carney, D., DiLeone, B., Fox-Galalis, A. B., Klap, R., Yee, E., Romodan, Y., Strehlow, H., Yosef, J., & Yano, E. (2018). Practice-based research networks add value to evidence-based quality improvement. *Healthcare, 6*, 128-134. doi:10.1016/j.hjdsi.2017.06.008
- Gould, C. E., Bruce, J., Merrell, S. B., Wetherell, J. L., O'Hara, R., Kuhn, E. R., Mary, K., & Beaudreau, S. (2017). Development of a video-delivered relaxation treatment of late-life anxiety for veterans. *International Psychogeriatrics, 29*, 1633-1645. doi:10.1017/S1041610217000928
- Green, J. D., Kearns, J. C., Rosen, R., Keane, T. M., & Marx, B. P. (2018). Evaluating the effectiveness of safety plans for military veterans: Do safety plans tailored to veteran characteristics decrease suicide risk? *Behavior Therapy*, 49, 931-938. doi:10.1016/j.beth.2017.11.005
- Gulliver, S. B., Zimering, R. T., Knight, J. A., Morrisette, S. A., Kamholz, B. A., Meyer, E. C., Keane, T. M., Pennington, M. L., Denman, T. C., Carpenter, T. P., & Kimbrel, N. A. (2018). Tobacco and alcohol use among firefighters during their first three years of service. *Psychology of Addictive Behaviors, 32*, 255-263. doi:10.1037/adb0000366
- 82. **Gutner, C. A.**, Pedersen, E., & Drummond, S. (2018). Going direct to the consumer: Examining treatment preferences for veterans with insomnia, PTSD, and depression. *Psychiatry Research, 263*, 108-114. doi:10.1016/j.psychres.2018.02.045
- 83. **Hamblen, J. L.**, Rancone, R., Giusti, L., & Casacchai, M. (2018). La sofferenza psicologica da disastri naturali e trauma importanti: Trattamento cogntivo-comportamentale, manuale per gli operatori [Psychological suffering from natural disasters and major traumas: Therapist manual]. Roma, Italy: Il Pensiero Scientifico Editore.

- 84. **Hamblen, J. L.**, Rancone, R., Giusti, L., & Casacchai, M. (2018). La sofferenza psicologica da disastri naturali e trauma importanti: Trattamento cogntivo-comportamentale, quaderno di lavoro per l'utente [Psychological suffering from natural disasters and major traumas: Client workbook]. Roma, Italy: Il Pensiero Scientifico Editore.
- Hardy, K. V., Noordsy, D. L., Ballon, J. S., McGovern, M. P., Salomon, C., & Wiltsey Stirman, S. (2018). Impact of age of onset of psychosis and engagement in higher education on duration of untreated psychosis. *Journal of Mental Health*, 27, 257-262. doi:10.1080/09638237.2018.1466047
- Hayes, J. P., Hayes, S., Miller, D. R., Lafleche, G., Logue, M. W., & Verfaellie, M. (2017). Automated measurement of hippocampal subfields in PTSD: Evidence for smaller dentate gyrus volume. *Journal of Psychiatric Research*, 95, 247-252. doi:10.1016/j. jpsychires.2017.09.007
- Hayes, J. P., Reagan, A., Logue, M. W., Hayes, S., Samimi Sadeh, N., Miller, D. R., Verfaellie, M., Wolf, E. J., McGlinchey, R. E., Milberg, W. P., Stone, A., Schichman, S. A., & Miller, M. W. (2018). BDNF genotype is associated with hippocampal volume in mild traumatic brain injury. *Genes, Brain and Behavior, 17*, 107-117. doi:10.1111/gbb.12403
- Heinz, A. J., Meffert, B., Halvorson, M. A., Blonigen, D., Timko., C., & Cronkite, R. (2018). Employment characteristics, work environment, and the course of depression over 23 years: Does employment help foster resilience? *Depression and Anxiety, 35*, 861-867. doi:10.1002/da.22782
- Herbst, E., Pennington, D., Kuhn, E. R., McCaslin, S. E., Delucchi, K., Batki, S. L., Dickter, B., & Carmody, T. (2018). Mobile technology for treatment augmentation in veteran smokers with posttraumatic stress disorder. *American Journal of Preventive Medicine, 54*, 124-128. doi:10.1016/j. amepre.2017.08.016
- Holmes, S. E., Scheinost, D., DellaGioia, N., Davis, M. T., Matuskey, D., Pietrzak, R. H., Hampson, M., Krystal, J. H., & Esterlis, I. (2018). Cerebellar and prefrontal cortical alterations in PTSD: Structural and functional evidence. *Chronic Stress.* doi:10.1177/2470547018786390
- Huynh, A. K., Hamilton, A. B., Farmer, M. M., Bean-Mayberry, B., Wiltsey Stirman, S., Moin, T., & Finley, E. P. (2018). A pragmatic approach to guide implementation evaluation research: Strategy mapping for complex interventions. *Frontiers in Public Health, 6*, 134. doi:10.3389/fpubh.2018.00134
- Iverson, K. M., Sorrentino, A., Bellamy, S., Grillo, A., Haywood, T., Medvedeva, E., Roberts, C., & Dichter, M. (2018). Adoption, penetration, and effectiveness of a secondary risk screener for intimate partner violence: Evidence to inform screening practices in integrated care settings. *General Hospital Psychiatry*, 51, 79-84. doi:10.1016/j.genhosppsych.2018.01.002
- 93. Johnson, C. M., Wiltsey Stirman, S., & La Bash, H. (2018). De-implementation of harmful, pseudoscientific practices: An underutilized step in implementation research. *The Behavior Therapist*, 41, 32-35. Retrieved from https://www. cbtdbtassociates.com/blog/wp-content/uploads/2013/04/The-Behavior-Therapist-41-1.pdf
- Kachadourian, L., Gandelman, E., Ralevski, E., & Petrakis, I. (2018). Suicidal ideation in military veterans with alcohol dependence and PTSD: The role of hostility. *The American Journal on Addictions*, 27, 124-130. doi:10.1111/ajad.12688

- 95. Karatzias, T., Cloitre, M., Maercker, A., Kazlauskas, E., Shevlin, M., Hyland, P., Bisson, J. I., Roberts, N. P., & Brewin, C. R. (2018). PTSD and complex PTSD: ICD-11 updates on concept and measurement in the UK, USA, Germany and Lithuania. *European Journal of Psychotraumatology, 8*. doi:10.1080/20008198.2017.1 418103
- 96. Karatzias, T., Shevlin, M., Hyland, P., Brewin, C., Cloitre, M., Bradley, A., Kitchiner, N. J., Jumbe, S., Bisson, J. I., & Roberts, N. P. (2018). The role of negative cognitions, emotion regulation strategies and attachment style in complex posttraumatic stress disorder (CPTSD): Implications for new and existing therapies. *British Journal of Clinical Psychology*, *57*, 177-185. doi:10.1111/ bjc.12172
- Kazlauskas, E., Gegieckaite, G., Hyland, P., Zelviene, P., & Cloitre, M. (2018). The structure of ICD-11 PTSD and complex PTSD in Lithuanian mental health services. *European Journal of Psychotraumatology*, 9. doi:10.1080/20008198.2017.1414559
- Keefe, J. R., Wiltsey Stirman, S., Cohen, Z. D., DeRubeis, R. J., Smith, B. N., & Resick, P. A. (2018). In rape trauma PTSD, patient characteristics indicate which trauma-focused treatment they are most likely to complete. *Depression and Anxiety*, 35, 330-338. doi:10.1002/da.22731
- 99. Khan, C. T., & Woodward, S. H. (2018). Calibrating actigraphy to improve sleep efficiency estimates. *Journal of Sleep Research*, 27, e12613. doi:10.1111/jsr.12613
- Kilbourne, A. M., Schumacher, K., Frayne, S. M., Cypel, Y., Barbaresso, M. M., Nord, K. M., Perzhinsky, J., Lai, Z., Prenovost, K., **Spiro, A.**, Gleason, T. C., **Kimerling, R.**, Huang, G. D., Serpi, T. B., & Magruder, K. M. (2017). Physical health conditions among a population-based cohort of Vietnam-era women veterans: Agreement between self-report and medical records. *Journal of Women's Health*, *26*, 1244-1251. doi:10.1089/jwh.2016.6069
- 101. Kim, S., Han, S. C., Gallan, A. J., & Hayes, J. P. (2017). Neurometabolic indicators of mitochondrial dysfunction in repetitive mild traumatic brain injury. *Concussion*. doi:10.2217/ cnc-2017-0013
- 102. **Kimerling, R.** (2018). Sexual assault and women's health: Universal screening or universal precautions? *Medical Care, 56*, 645-648. doi:10.1097/MLR.00000000000948
- 103. Kredlow, M. A., **Pineles, S. L.**, Inslicht, S. S., Marin, M. F., Milad, M. R., Otto, M. W., & Orr, S. P. (2017). Assessment of skin conductance in African American and non-African American participants in studies of conditioned fear. *Psychophysiology*, *54*, 1741-1754. doi:10.1111/psyp.12909
- 104. Krystal, J. H., Abdallah, C., Pietrzak, R. H., Averill, L., Harpaz-Rotem, I., Levy, I., Kelmendi, B., & Southwick, S. M. (2018). Locus coeruleus hyperactivity in posttraumatic stress disorder: Answers and questions. *Biological Psychiatry*, 83, 197-199. doi:10.1016/j.biopsych.2017.09.027
- 105. Krystal, J. H., Davis, L. L., Neylan, T. C., Raskind, A., Schnurr, P. P., Stein, M. B., Vessicchio, J., Shiner, B., Gleason, T. D., & Huang, G. D. (2017). It is time to address the crisis in the pharmacotherapy of posttraumatic stress disorder: A consensus statement of the PTSD psychopharmacology working group. *Biological Psychiatry*, 82, e51-e59. doi:10.1016/j.biopsych.2017.03.007
- 106. Krystal, J. H., Davis, L. L., Neylan, T. C., Raskind, M. A., Schnurr, P. P., Stein, M. B., Vessicchio, J., Shiner, B., Gleason, T. C., & Huang, G. D. (2018). Reply to: It is time to look for new treatments for posttraumatic stress disorder: Can sympathetic system modulation be an answer? *Biological Psychiatry*, 84, e19-e20. doi:10.1016/j.biopsych.2017.09.031

- Kuhn, E. R., & McCaslin, S. E. (2018). Military and veteran students. In L. W. Roberts (Ed.), *Student mental health: A guide* for psychiatrists, psychologists, and leaders serving in higher education (pp. 449-458). New York, NY: Springer.
- Kuhn, E. R., van der Meer, C., Owen, J. E., Hoffman, J., Cash, R., Carrese, P., Olff, M., Bakker, A., Schellong, J., Lorenz, P., Schopp, M., Rau, H., Weidner, K., Arnberg, F., Cernvall, M., & Iversen, T. (2018). PTSD Coach around the world. *mHealth*. doi:10.21037/ mhealth.2018.05.01
- 109. Landis-Shack, N., Heinz, A. J., & Bonn-Miller, M. O. (2017). Music therapy for posttraumatic stress in adults: A theoretical review. *Psychomusicology: Music, Mind, and Brain, 27*, 334-342. doi:10.1037/pmu0000192
- Lee, D. J., Kearns, J. C., Wisco, B. E., Green, J. D., Gradus, J. L., Sloan, D. M., Nock, M. K., Rosen, R. C., Keane, T. M., & Marx, B. P. (2018). A longitudinal study of risk factors for suicide attempts among Operation Enduring Freedom and Operation Iraqi Freedom veterans. *Depression and Anxiety*, 35, 609-618. doi:10.1002/da.22736
- 111. Lehavot, K., Goldberg, S., Chen, J., Katon, J., Glass, J., Fortney, J., Simpson, T. L., & Schnurr, P. P. (2018). Do trauma type, stressful life events, and social support explain women veterans' high prevalence of PTSD? Social Psychiatry and Psychiatric Epidemiology, 53, 943-953. doi:10.1007/s00127-018-1550-x
- Logue, M. W., Smith, A. K., Wolf, E. J., Maniates, H., Stone, A., Schichman, S. A., McGlinchey, R. E., Milberg, W., & Miller, M. W. (2017). The correlation of methylation levels measured using Illumina 450K and EPIC BeadChips in blood samples. *Epigenomics*, 9, 1363-1371. doi:10.2217/epi-2017-0078
- 113. Logue, M. W., van Rooij, S., Dennis, E., Hayes, J. P., Stevens, L., Densmore, M., Haswell, C., Ipser, J., Koch, S., Korgaonkar, M., Lebois, L., Peverill, M., Baker, J., Boedhoe, P., Frijling, J., Gruber, S., Harpaz-Rotem, I., Jahanshad, N., Koopowitz, S., Levy, I., Nawijn, L., O'Connor, L., Olff, M., Salat, D., Sheridan, M., Spielberg, J., van Zuiden, M., Winternitz, S., Wolff, J., Wolf, E. J., Wang, X., Wrocklage, K. M., Abdallah, C., Bryant, R., Geuze, E., Jovanovic, T., Kaufman, M., King, L. A., Krystal, J. H., Lagopoulos, J., Lanius, R., Liberzon, I., McGlinchey, R., McLaughlin, K., Milberg, W., Miller, M. W., Ressler, K., Veltman, D., Stein, D., Thomaes, K., Thompson, P., & Morey, R. (2018). Smaller hippocampal volume in posttraumatic stress disorder: A multi-site ENIGMA-PGC study. *Biological Psychiatry*, 83, 244-253. doi:10.1016/j. biopsych.2017.09.006
- 114. Luoma, J. B., Hayes, S. C., & **Walser, R. D.** (2017). *Learning ACT: An Acceptance and Commitment Therapy skills training manual for therapists (2nd ed.).* Oakland, CA: New Harbinger.
- 115. Mackintosh, M. A., Niehaus, J., Taft, C. T., Marx, B. P., Grubbs, K., & Morland, L. A. (2017). Using a mobile application in the treatment of dysregulated anger among veterans. *Military Medicine, 182*, e1941-e1949. doi:10.7205/MILMED-D-17-00063
- 116. **Mackintosh, M. A.**, Schaper, K., Willis, E. A., Edland, S., Liu, C., & White, L. R. (2018). Effects of military service on marital stability among World War II U.S. veterans of Japanese descent. *Military Medicine*, *183*, e525-e531. doi:10.1093/milmed/usy091
- 117. Maguen, S., Madden, E., Patterson, O. V., DuVall, S. L., Goldstein, L. A., Burkman, K., & **Shiner, B.** (2018). Measuring use of evidence based psychotherapy for posttraumatic stress disorder in a large national healthcare system. *Administration and Policy in Mental Health and Mental Health Services Research*, 45, 519-529. doi:10.1007/s10488-018-0850-5

- 118. Malaktaris, A., Buzzella, B., Siegel, M., Myers, U., Browne, K., Norman, S. B., & Angkaw, A. (2018). OEF/OIF/OND veterans seeking PTSD treatment: Perceptions of partner involvement in trauma-focused treatment. *Military Medicine*. doi:10.1093/ milmed/usy231
- Maniates, H., Stoop, T. B., Miller, M. W., Halberstadt, L., & Wolf, E. J. (2018). Stress-generative effects of PTSD: Transactional associations between PTSD and stressful life events in a longitudinal sample. *Journal of Traumatic Stress, 31*, 191-201. doi:10.1002/jts.22269
- 120. Martz, E., Livneh, H., **Southwick, S. M.**, & **Pietrzak, R. H.** (2018). Posttraumatic growth moderates the effect of posttraumatic stress on quality of life in U.S. military veterans with lifethreatening illness or injury. *Journal of Psychosomatic Research*, *109*, 1-8. doi:10.1016/j.jpsychores.2018.03.004
- Mathew, S., Gueorguieva, R., Brandt, C., Fava, M., & Sanacora, G. (2017). A randomized, double-blind, placebo-controlled, sequential parallel comparison design trial of adjunctive riluzole for treatment-resistant major depressive disorder. *Neuropsychopharmacology*, 42, 2567-2574. doi:10.1038/ npp.2017.106
- 122. **McCarthy, E.**, & **Cook, J.** (2018). PTSD in late life: Special issues. *Psychiatric Times*, *35*, 13-14. Retrieved from http://www.psychiatrictimes.com/special-reports/ptsd-late-life
- 123. McCaslin, S. E., Herbst, E. D., Armitage, N. H., Allen, I., Neylan, T. C., Becket-Davenport, C., Choucroun, G., Best, S., & Inslicht, S. S. (2018). Deployment anxiety reduction training: A pilot study of acceptability and feasibility in current or recent active duty service members. *Military Medicine, 183 (suppl_1)*, 371-378. doi:10.1093/milmed/usx154
- 124. **McCaslin, S. E., Ortigo, K. M., Simon, E. P.**, & **Ruzek, J. I.** (2018). Understanding and treating posttraumatic stress disorder in veterans. In L. W. Roberts & C. H. Warner (Eds.), *Military and veteran mental health: A comprehensive guide* (pp. 225-243). New York, NY: Springer.
- 125. McLean, C. P., Rauch, S. A., Foa, E. B., Sripada, R. K., Tannahill, H. S., Mintz, J., Yarvis, J., Young-McCaughan, S., Dondanville, K., Hall-Clark, B., Fina, B., Keane, T. M., & Peterson, A. (2018). Design of a randomized controlled trial examining the efficacy and biological mechanisms of Web-Prolonged Exposure and Present-Centered Therapy for PTSD among active-duty military personnel and veterans. *Contemporary Clinical Trials*, 64, 41-48. doi:10.1016/j.cct.2017.11.008
- 126. Medici, C. R., **Gradus, J. L.**, Pedersen, L., Sørensen, H. T., Østergaard, S. D., & Christiansen, C. F. (2017). No impact of preadmission anti-inflammatory drug use on risk of depression and anxiety after critical illness. *Critical Care Medicine*, *45*, 1635-1641. doi:10.1097/CCM.00000000002571
- 127. Meyer, E. C., Konecky, B., Kimbrel, N. A., DeBeer, B., Marx, B. P., Schumm, J., Penk, W., Gulliver, S. B., & Morissette, S. B. (2018). Gender differences in associations between DSM–5 posttraumatic stress disorder symptom clusters and functional impairment in war veterans. *Psychological Services*, 15, 230-237. doi:10.1037/ser0000171
- 128. Meyer, E. C., Walser, R. D., Hermann, B., La Bash, H., DeBeer, B., Morissette, S. B., Kimbrel, N. A., Kwok, O. M., Batten, S. V., & Schnurr, P. P. (2018). Acceptance and Commitment Therapy for co-occurring posttraumatic stress disorder and alcohol use disorders in veterans: Pilot treatment outcomes. *Journal of Traumatic Stress*, *31*, 781-789. doi:10.1002/jts.22322

- 129. Mignogna, J., Martin, L. A., Harik, J. M., Hundt, N. E., Kauth, M. R., Naik, A., Sorocco, K. H., Benzer, J., & Cully, J. (2018). "I had to somehow still be flexible": Exploring adaptations during implementation of brief cognitive behavioral therapy in primary care. *Implementation Science*, 13, 76. doi:10.1186/s13012-018-0768-z
- Miller, K. E., Brownlow, J. A., Woodward, S. H., & Gehrman, P. R. (2017). Sleep and dreaming in posttraumatic stress disorder. *Current Psychiatry Reports, 19*, 71-81. doi:10.1007/s11920-017-0827-1
- 131. Miller, K. E., Koffel, E., Kramer, M. D., Erbes, C. R., Arbisi, P. A., & Polusny, M. A. (2018). At-home partner sleep functioning over the course of military deployment. *Journal of Family Psychology*, 32, 114-122. doi:10.1037/fam0000262
- 132. Miller, K. E., Kuhn, E. R., Owen, J. E., Taylor, K., Yu, J. S., Weiss, B. J., Crowley, J. J., & Trockel, M. (2017). Clinician perceptions related to the use of the CBT-I Coach mobile app. *Behavioral Sleep Medicine*. doi:10.1080/15402002.2017.1403326
- 133. Miller, M. W., Lin, A. P., Wolf, E. J., & Sullivan, D. R. (2018). Oxidative stress, inflammation and neuroprogression in chronic PTSD. *Harvard Review of Psychiatry*, 26, 57-69. doi:10.1097/ HRP.00000000000167
- 134. Miller, M. W., Maniates, H., Wolf, E. J., Logue, M. W., Schichman, S., Stone, A., Milberg, W., & McGlinchey, R. (2018). CRP polymorphisms and DNA methylation of the AIM2 gene influence associations between trauma exposure, PTSD, and C-reactive protein. *Brain, Behavior, and Immunity, 67*, 194-202. doi:10.1016/j.bbi.2017.08.022
- 135. Mohr, D. C., Rosen, C. S., Schnurr, P. P., Orazem, R. J., Noorbaloochi, S., Clothier, B. A., Eftekhari, A., Bernardy, N. C., Chard, K. M., Crowley, J. J., Cook, J., Kehle-Forbes, S., Ruzek, J. I., & Sayer, N. A. (2018). The influence of team functioning and workload on sustainability of trauma-focused evidence-based psychotherapies. *Psychiatric Services*, 69, 879-886. doi:10.1176/ appi.ps.201700432
- 136. Monson, C., Chard, K., & **Morland, L. A.** (2018). Written Exposure Therapy vs Cognitive Processing Therapy. *JAMA Psychiatry*, *75*, 757-758. doi:10.1001/jamapsychiatry.2018.0810
- 137. Moshier, S. J., Bovin, M. J., Gay, N. G., Wisco, B. E., Mitchell, K. S., Lee, D. J., Sloan, D. M., Weathers, F. W., Schnurr, P. P., Keane, T. M., & Marx, B. P. (2018). Examination of posttraumatic stress disorder symptom networks using clinician-rated and self-rated data. *Journal of Abnormal Psychology*, 127, 541-547. doi:10.1037/abn0000368
- 138. **Moshier, S. J., Parker-Guilbert, K., Marx, B. P.**, & **Keane, T. M.** (2018). Posttraumatic stress disorder. In J. Hunsley & E. Mash (Eds.), *A guide to assessments that work (2nd ed.)* (pp. 329-358). New York, NY: Oxford University Press.
- 139. Mota, N., Han, S., Harpaz-Rotem, I., Maruff, P., Krystal, J. H., Southwick, S. M., Gelernter, J., & Pietrzak, R. H. (2018). Apolipoprotein E gene polymorphism, trauma burden, and posttraumatic stress symptoms in U.S. military veterans: Results from the National Health and Resilience in Veterans Study. Depression and Anxiety, 35, 168-177. doi:10.1002/da.22698
- 140. Najavits, L. N., Krinsley, K., Waring, M. E., Gallagher, M. W., & Skidmore, C. (2018). A randomized controlled trial for veterans with PTSD and substance use disorder: Creating Change versus Seeking Safety. Substance Use & Misuse, 53, 1788-1800. doi:10.10 80/10826084.2018.1432653

- 141. Nardi, A. E., Cosci, F., Balon, R., Weintraub, S. J., Freire, R. C., Krystal, J. H., Roth, T., Silberman, E. K., Sonino, N., Fava, G. A., Starcevic, V., Dubovsky, S. L., Salzman, C., Rickels, K., Greenblatt, D. J., Shader, R. I., & Chouinard, G. (2018). The prescription of benzodiazepines for panic disorder: Time for an evidence-based educational approach. *Journal of Clinical Psychopharmacology*, 38, 283-285. doi:10.1097/JCP.000000000000908.
- 142. Niles, B. L., Mori, D., Polizzi, C., Pless Kaiser, A., Weinstein, E., Gershkovich, M., & Wang, C. (2018). A systematic review of randomized trials of mind-body interventions for PTSD. *Journal* of *Clinical Psychology*, 20, 1-24. doi:10.1002/jclp.22634
- 143. Nillni, Y. I., Wesselink, A., Hatch, E., Mikkelsen, E., Gradus, J. L., Rothman, K., & Wise A, L. (2018). Mental health, psychotropic medication use, and menstrual cycle characteristics. *Clinical Epidemiology*, *10*, 1073-1082. doi:10.2147/CLEP.S152131
- 144. Norman, S. B., Haller, M., Kim, H., Allard, C., Porter, K., Stein, M., Venners, M., Authier, C., & Rauch, S. (2018). Trauma related guilt cognitions partially mediate the relationship between PTSD symptom severity and functioning among returning combat veterans. *Journal of Psychiatric Research*, 100, 56-62. doi:10.1016/j.jpsychires.2018.02.003
- 145. O'Connor, A., Herbst, E., McCaslin, S. E., Armstrong, K., Leach, B., & Jersky, B. (2018). Supporting veteran transitions to the academic setting: VA on campus. *Community College Journal of Research and Practice*, 42, 303-315. doi:10.1080/10668926.2017. 1294121
- 146. O'Neil, M. E., Laman-Maharg, B., Schnurr, P. P., Carlson, K. F., Twamley, E. W., Peterson, C., Storzbach, D., Helfand, M., & Sayer, N. A. (2017). Objective cognitive impairment and subjective cognitive problems in veterans initiating psychotherapy for posttraumatic stress disorder: An exploratory study. *Applied Neuropsychology*, 27, 1-8. Retrieved from: doi:10.1080/23279095 .2017.1395334
- 147. Ofman, P., Hoffmeister, P., Kaloupek, D. G., Gagnon, D. R., Peralta, A., Djousse, L., Gaziano, J. M., & Rahilly-Tierney, C. R. (2018). Posttraumatic stress disorder and mortality in VA patients with implantable cardioverter defibrillator. *Clinical Cardiology*, 41, 652-659. doi:10.1002/clc.22945
- 148. Owen, J. E., Kuhn, E. R., Jaworski, B. K., McGee-Vincent, P., Juhasz, K. M., Hoffman, J. E., & Rosen, C. S. (2018). VA mobile apps for PTSD and related problems: Public health resources for veterans and those who care for them. *mHealth*. doi:10.21037/ mhealth.2018.05.07
- 149. Pennington, M., Carpenter, T., Synett, S., Torres, V., Teague, J., Morissette, S., **Knight, J. A.**, Kamholz, B., **Keane, T. M.**, Zimering, R., & Gulliver, S. B. (2018). The influence of exposure to natural disasters on depression and PTSD symptoms among firefighters. *Prehospital and Disaster Medicine, 33*, 102-108. doi:10.1017/ S1049023X17007026
- 150. Peterson, A., Foa, E., Blount, T., McLean, C. P., Shah, D., Young-McCaughan, S., Litz, B., Schobitz, R., Castillo, D., Rentz, T., Yarvis, J., Dondanville, K., Fina, B., Hall-Clark, B., Brown, L., DeBeer, B., Jacoby, V., Hancock, A., Williamson, D., Evans, W., Synett, S., Straud, C., Hansen, H., Meyer, E., Javors, M., Sharrieff, A., Lara-Ruiz, J., Koch, L., Roache, J., Mintz, J., & Keane, T. M. (2018). Intensive prolonged exposure therapy for combat-related posttraumatic stress disorder: Design and methodology of a randomized clinical trial. *Contemporary Clinical Trials, 72*, 126-136. doi:10.1016/j.cct.2018.07.016

Appendix D: Fiscal Year 2018 Publications

- 151. Peterson, A., Resick, P., Mintz, J., Young-McCaughan, S., McGeary, D., McGeary, C., Velligan, D., Macdonald, A., Mata-Galan, E., Holliday, S., Dillon, K., Roache, J., Williams Christians, I., Moring, J., Bira, L., Nabity, P., Hancock, A., & Hale, W. (2018). Design of a clinical effectiveness trial of in-home Cognitive Processing Therapy for combat-related PTSD. *Contemporary Clinical Trials*, 73, 27-35. doi:10.1016/j.cct.2018.08.005
- 152. Petrakis, I., Ralevski, E., Gueorguieva, R., O'Malley, S., Arias, A. J., Sevarino, K., Jane, J., O'Brien, E., & Krystal, J. H. (2018). Mecamylamine treatment for alcohol dependence: A randomized controlled trial. *Addiction*, *113*, 6-14. doi:10.1111/ add.13943
- Petrik, M. L., Betz, M. E., Olson-Madden, J., Davidson, C., & Allen, M. (2017). Identification, assessment, and management of suicide risk in emergency departments: Significant updates in research and practice. *Current Emergency and Hospital Medicine Reports, 5*, 94-102. doi:10.1007/s40138-017-0135-4
- 154. Pineles, S. L., Nillni, Y. I., Pinna, G., Irvine, J., Webb, A., Arditte Hall, K., Hauger, R. L., Miller, M. W., Resick, P. A., Orr, S. P., & Rasmusson, A. M. (2018). PTSD in women is associated with a block in conversion of progesterone to the GABAergic neurosteroids allopregnanolone and pregnanolone measured in plasma. *Psychoneuroendocrinology*, 93, 133-141. doi:10.1016/j. psyneuen.2018.04.024
- 155. Pless Kaiser, A., Cook, J., Wang, J., Davison, E., & Schnurr, P. P. (2018). Mental health considerations and utilization in later life adults and veterans. In A. Spiro, R. A. Settersten, & C. M. Aldwin (Eds.), Long-term outcomes of military service: The health and wellbeing of aging veterans (pp. 259-271). Washington, DC: APA.
- 156. Polimanti, R., Amstadter, A., Stein, M., Almli, L., Baker, D. G., Bierut, L., Bradley, B., Farrer, L., Johnson, E., King, A., Kranzler, H. R., Maihofer, A., Rice, J., Roberts, A., Saccone, N., Zhao, H., Liberzon, I., Ressler, K., Nievergelt, C., Koenen, K., & Gelernter, J. (2017). A putative causal relationship between genetically determined female body shape and posttraumatic stress disorder. *Genome Medicine*, *9*, 99. doi:10.1186/s13073-017-0491-4
- 157. Portnoy, G., Haskell, S., King, M. W., Maskin, R., Gerber, M., & Iverson, K. M. (2018). Accuracy and acceptability of a screening tool for identifying intimate partner violence perpetration among women veterans: A pre-implementation evaluation. *Women's Health Issues, 28*, 439-445. doi:10.1016/j. whi.2018.04.003
- 158. Pruiksma, K. E., Wachen, J. S., & Resick, P. A. (2018). Psychotherapy interventions. In E. Vermetten, T. Neylan, S. R. Pandi-Perumal, & M. Kramer (Eds.), *Sleep and combat-related post-traumatic stress disorders* (pp. 277-292). New York, NY: Humana Press.
- 159. **Ralevski, E.**, Shanabrough, M., Newcomb, J., Gandelman, E., Hayden, R., Horvath, T., & **Petrakis, I.** (2018). Ghrelin is related to personality differences in reward sensitivity and impulsivity. *Alcohol & Alcoholism, 53*, 52-56. doi:10.1093/alcalc/agx082
- 160. Rasmusson, A. M., & Pineles, S. L. (2018). Neurotransmitter, peptide and steroid hormone abnormalities in PTSD: Biological endophenotypes relevant to treatment. *Current Psychiatry Reports*, 20, 52. doi:10.1007/s11920-018-0908-9

- 161. Rauch, S. A. M., Simon, N. M., Kim, H. M., Acierno, R., King, A. P., Norman, S. B., Venners, M. R., Porter, K., Phan, K. L., Tuerk, P. W., Allard, C. B., Liberzon, I., Rothbaum, B. O., Martis, B., Stein, M. B., & Hoge, C. W. (2018). Integrating biological treatment mechanisms into randomized clinical trials: Design of PROGrESS (PROIonGed ExpoSure and Sertraline Trial). *Contemporary Clinical Trials*, 64, 128-138. doi:10.1016/j.cct.2017.10.013
- 162. Ronzitti, S., Kraus, S. W., **Hoff, R.**, & Potenza, M. (2018). Stress moderates the relationships between problem-gambling severity and specific psychopathologies. *Psychiatry Research*, 259, 254-261. doi:10.1016/j.psychres.2017.10.028
- Ronzitti, S., Kraus, S. W., Hoff, R., Clerici, M., & Potenza, M. (2018). Problem-gambling severity, suicidality and DSM-IV Axis II personality disorders. *Addictive Behaviors, 82*, 142-150. doi:10.1016/j.addbeh.2018.03.003
- 164. Ruben, M., Blanch-Hartigan, D., & Shipherd, J. C. (2018). To know another's pain: A meta-analysis of caregivers' and healthcare providers' pain assessment accuracy. Annals of Behavioral Medicine, 52, 662-685. doi:10.1093/abm/kax036
- 165. **Samimi Sadeh, N.**, Spielberg, J., & **Hayes, J. P.** (2018). Impulsive responding in threat and reward contexts as a function of PTSD symptoms and trait disinhibition. *Journal of Anxiety Disorders, 53*, 76-84. doi:10.1016/j.janxdis.2017.11.001
- 166. Samuelson, K., Abadjian, L., Jordan, J., Bartel, A., Vasterling, J. J., & Seal, K. (2017). The association between PTSD and functional outcome is mediated by perception of cognitive problems rather than objective neuropsychological test performance. *Journal of Traumatic Stress, 30*, 521-530. doi:10.1002/jts.22223
- 167. Sayed, S., Van Dam, N., Horn, S., Kautz, M., Parides, M., Costi, S., Collins, K., lacoviello, B., losifescu, D., Mathé, A., **Southwick**, **S. M.**, Feder, A., Charney, D., & Murrough, J. (2018). A randomized dose-ranging study of neuropeptide Y in patients with posttraumatic stress disorder. *International Journal of Neuropsychopharmacology*, *21*, 3-11. doi:10.1093/ijnp/pyx109
- 168. Sayer, N. A., Rosen, C. S., Bernardy, N. C., Cook, J., Orazem, R. J., Chard, K. M., Mohr, D. C., Kehle-Forbes, S., Eftekhari, A., Crowley, J. J., Ruzek, J. I., Smith, B. N., & Schnurr, P. P. (2017). Context matters: Team and organizational factors associated with reach of evidence-based psychotherapies for PTSD in the Veterans Health Administration. Administration and Policy in Mental Health and Mental Health Services Research, 44, 904-918. doi:10.1007/s10488-017-0809-y
- 169. Sayuk, G. S., Kanuri, N., Gyawali, C. P., Gott, B. M., Nix, B. D., & Rosenheck, R. A. (2018). Opioid medication use in patients with gastrointestinal diagnoses vs unexplained gastrointestinal symptoms in the U.S. Veterans Health Administration. *Alimentary Pharmacology & Therapeutics*, 47, 784-791. doi:10.1111/ apt.14503
- 170. Schnyder, U., Schäfer, I., Aakvaag, H. H., Ajdukovic, D., Bakker, A., Bisson, J. I., Brewer, D., **Cloitre, M.**, Dyb, G. A., Frewen, P., Lanza, J., Le Brocque, R., Lueger-Schuster, B., Mwiti, G. K., Oe, M., Rosner, R., Schellong, J., Shigemura, J., Wu, K., & Olff, M. (2017). The global collaboration on traumatic stress. *European Journal of Psychotraumatology*, 8. doi:10.1080/20008198.2017.1403257
- 171. Scholten, J., **Vasterling, J. J.**, & Grimes, J. (2017). Traumatic brain injury clinical practice guidelines and best practices from the VA state of the art conference. *Brain Injury, 31*, 1246-1251. doi:10.10 80/02699052.2016.1274780

- 172. Seelig, A. D., Rivera, A. C., Powell, T. M., Williams, E. C., Peterson, A. V., Littman, A. J., Maynard, C., Street, A. E., Bricker, J. B., & Boyko, E. J. (2017). Patterns of smoking and unhealthy alcohol use following sexual trauma among U.S. service members. *Journal of Traumatic Stress*, 30, 502-511. doi:10.1002/jts.22214
- 173. Shaw, J., Joyce, V., Schmitt, S. K., Frayne, S. M., Shaw, K., Danielsen, B., **Kimerling, R.**, Asch, S. M., & Phibbs, C. S. (2018). Selection of Higher Risk Pregnancies into Veterans Health Administration Programs: Discoveries from Linked Department of Veterans Affairs and California Birth Data. *Health Services Research*. doi:10.1111/1475-6773.13041
- 174. Shelton, R. C., Cooper, B. R., & Wiltsey Stirman, S. (2018). The sustainability of evidence-based interventions and practices in public health and health care. *Annual Review of Public Health*, 39, 55-76. doi:10.1146/annurev-publhealth-040617-014731
- 175. Shevlin, M., Hyland, P., Roberts, N. P., Bisson, J. I., Brewin, C. R., & Cloitre, M. (2018). A psychometric assessment of disturbances in self-organization symptom indicators for ICD-11 Complex PTSD using the International Trauma Questionnaire. *European Journal of Psychotraumatology*. doi:10.1080/20008198.2017.141 9749
- 176. Shiner, B., Westgate, C. L., Simiola, V., Thompson, R. S., Schnurr, P. P., & Cook, J. (2018). Measuring use of evidence-based psychotherapy for PTSD in VA residential treatment settings with clinician survey and electronic medical record Templates. *Military Medicine, 183*, e539-e546. doi:10.1093/milmed/usy008
- 177. **Shipherd, J. C.**, & Salters-Pedneault, K. (2018). Do acceptance and mindfulness moderate the relationship between maladaptive beliefs and posttraumatic distress? *Psychological Trauma: Theory, Research, Practice, and Policy, 10*, 95-102. doi:10.1037/tra0000248
- 178. **Shipherd, J. C.**, Ruben, M., Livingston, N., Curreri, A., & Skolnik, A. (2018). Treatment experiences among LGBT veterans with discrimination-based trauma exposure: A pilot study. *Journal of Trauma & Dissociation, 19*, 461-475. doi:10.1080/15299732.2018 .1451973
- 179. Siegel, E., Haller, M., Ruifeng, C., Trim, R. S., Tate, S. R., & Norman, S. B. (2017). Examining changes in negative mood regulation expectancies, posttraumatic stress disorder, depression, and substance use following integrated cognitivebehavioral therapy. *Journal of Substance Abuse, 38*, 468-472. doi: 10.1080/08897077.2017.1342736
- 180. Silverstein, M., Dieujuste, N., Kramer, L., Lee, D. J., & Weathers, F. (2018). Construct validation of the hybrid model of posttraumatic stress disorder: Distinctiveness of the new symptom clusters. *Journal of Anxiety Disorders, 54*, 17-23. doi:10.1016/j.janxdis.2017.12.003
- 181. Sippel, L. M., Han, S., Watkins, L. E., Harpaz-Rotem, I., Southwick, S. M., Krystal, J. H., Olff, M., Sherva, R., Farrer, L., Kranzler, H. R., Gelernter, J., & Pietrzak, R. H. (2017). Oxytocin receptor gene polymorphisms, attachment, and PTSD: Results from the National Health and Resilience in Veterans Study. *Journal of Psychiatric Research*, 94, 139-147. doi:10.1016/j. jpsychires.2017.07.008
- 182. Sippel, L. M., Holtzheimer, P. E., Friedman, M. J., & Schnurr, P. P. (2018). Defining treatment-resistant posttraumatic stress disorder: A framework for future research. *Biological Psychiatry*, 84, e37-e41. doi:10.1016/j.biopsych.2018.03.011

- 183. **Sloan, D. M.**, & **Marx, B. P.** (2018). Maximizing outcomes associated with expressive writing. A commentary to Burkner and colleagues. *Clinical Psychology: Science and Practice, 25*, e12231. doi:10.1111/cpsp.12231
- 184. Sloan, D. M., & Schnurr, P. P. (2018). Group therapy. In C. B. Nemeroff & C. R. Marmar (Eds.), *Posttraumatic stress disorder* (pp. 607-620). New York, NY: Oxford University Press.
- 185. Sloan, D. M., Marx, B. P., & Lee, D. J. (2018). Reply to questions raised about brief exposure-based treatment versus cognitive processing therapy: A randomized non-inferiority clinical trial. JAMA Psychiatry, 75, 758-759. doi:10.1001/ jamapsychiatry.2018.0813
- 186. Sloan, D. M., Marx, B. P., Lee, D. J., & Resick, P. A. (2018). A brief exposure-based treatment vs Cognitive Processing Therapy for posttraumatic stress disorder: A randomized noninferiority clinical trial. JAMA Psychiatry, 75, 233-239. doi:10.1001/ jamapsychiatry.2017.4249
- 187. Smith, N., Tsai, J., Pietrzak, R. H., Cook, J., Hoff, R., & Harpaz-Rotem, I. (2017). Differential predictive value of PTSD symptom clusters for mental health care among Iraq and Afghanistan veterans following PTSD diagnosis. *Psychiatry Research*, 256, 32-39. doi:10.1016/j.psychres.2017.06.005
- Smith, T. L., Landes, S. J., Lester-Williams, K., Day, K. T., Batdorf, W., Brown, G. K., Trockel, M., Smith, B. N., Chard, K. M., Healy, E., & Weingardt, K. R. (2017). Developing alternative training delivery methods to improve psychotherapy implementation in the U.S. Department of Veterans Affairs. *Training and Education in Professional Psychology*, *11*, 266-275. doi:10.1037/tep0000156
- 189. Southwick, F., & **Southwick, S. M.** (2018). The loss of a sense of control as a major contributor to physician burnout: A neuropsychiatric pathway to prevention and recovery. *JAMA Psychiatry, 75*, 665-666. doi:10.1001/jamapsychiatry.2018.0566
- 190. Stefanovics, E., Potenza, M., & **Pietrzak, R. H.** (2017). Gambling in a national U.S. veteran population: Prevalence, sociodemographics, and psychiatric comorbidities. *Journal of Gambling Studies, 33*, 1099-1120. doi:10.1007/s10899-017-9678-2
- 191. Stefanovics, E., Rosenheck, R. A., Jones, K., Huang, G., & Krystal, J. H. (2018). Minimal clinically important differences (MCID) in assessing outcomes of post-traumatic stress disorder. *Psychiatric Quarterly*, 89, 141-155. doi:10.1007/s11126-017-9522-y
- 192. Stein, M., Ware, E., Mitchell, C., Chen, C., Borja, S., Cai, T., Dempsey, C., Fullerton, C., **Gelernter, J.**, Heeringa, S., Jain, S., Kessler, R., Naifeh, J., Nock, M., Ripke, S., Sun, X., Beckham, J., Kimbrel, N. A., Ursano, R., & Smoller, J. (2017). Genomewide association studies of suicide attempts in U.S. soldiers. *American Journal of Medical Genetics Part B: Neuropsychiatric Genetics*, *174*, 786-797. doi:10.1002/ajmg.b.32594
- 193. Stewart, R. E., Chambless, D. L., & **Wiltsey Stirman, S.** (2018). Decision making and the use of evidence-based practice: Is the three-legged stool balanced? *Practice Innovations, 3*, 56-76. doi:10.1037/pri0000063
- 194. Strauss, J., **Norman, S. B.**, Risbrough, V. B., Acheson, D., & Drummond, S. (2018). REM sleep and safety signal learning in posttraumatic stress disorder: A preliminary study in military veterans. *Neurobiology of Stress, 9*, 22-28. doi:10.1016/j. ynstr.2018.07.001

Appendix D: Fiscal Year 2018 Publications

- 195. Street, A. E., & Dardis, C. (2018). Using a social construction of gender lens to understand gender differences in posttraumatic stress disorder. *Clinical Psychology Review*. doi:10.1016/j. cpr.2018.03.001
- 196. Su, T. P., Chen, M. H., Li, C. T., Lin, W. C., Hong, C. J., Gueorguieva, R., Tu, P. C., Bai, Y. M., Cheng, C. M., & Krystal, J. H. (2017). Doserelated effects of adjunctive ketamine in Taiwanese patients with treatment-resistant depression. *Neuropsychopharmacology*, 42, 2482-2492. doi:10.1038/npp.2017.94
- 197. Sullivan, D. R., Hayes, J. P., Lafleche, G., Salat, D., & Verfaellie, M. (2018). Functional brain alterations association with cognitive control in blast-related mild traumatic brain injury. *Journal* of the International Neuropsychological Society, 24, 662-672. doi:10.1017/S1355617718000279
- 198. Suri, P., Stolzmann, K., Iverson, K. M., Williams, R., Meterko, M., Yan, K., Gormley, K., & Pogoda, T. (2017). Associations between traumatic brain injury history and future headache severity in veterans: A longitudinal study. *Archives of Physical Medicine and Rehabilitation*, 98, 2118-2125. doi:10.1016/j.apmr.2017.04.008
- 199. **Taft, C. T.**, Creech, S. K., & Murphy, C. M. (2017). Anger and aggression in PTSD. *Current Opinions in Psychology, 14*, 67-71. doi:10.1016/j.copsyc.2016.11
- 200. Thompson, R., Simiola, V., Schnurr, P. P., Wiltsey Stirman, S., & Cook, J. (2018). VA residential treatment providers' use of two evidence-based psychotherapies for PTSD: Global endorsement versus specific components. *Psychological Trauma: Theory, Research, Practice, and Policy, 10*, 131-139. doi:10.1037/ tra0000220
- Thompson-Hollands, J., Litwack, S. D., Ryabchenko, K. A., Niles, B. L., Beck, J. G., Unger, W., & Sloan, D. M. (2018). Alliance across group treatment for veterans with posttraumatic stress disorder: The role of interpersonal trauma and treatment type. *Group Dynamics: Theory, Research, and Practice, 22*, 1-15. doi:10.1037/ gdn0000077
- Thompson-Hollands, J., Marx, B. P., Lee, D. J., Resick, P. A., & Sloan, D. M. (2018). Long-term treatment gains of a brief exposure-based treatment for PTSD. *Depression and Anxiety*, 35, 985-991. doi:10.1002/da.22825
- 203. Tiet, Q. Q., Leyva, Y. E., Moos, R. H., & Smith, B. N. (2017). Diagnostic accuracy of a two-item Drug Abuse Screening Test (DAST-2). Addictive Behaviors, 74, 112-117. doi:10.1016/j. addbeh.2017.06.008
- 204. Trim, J. G., Galovski, T. E., Wagner, A., & Brewerton, T. (2017). Treating ED-PTSD patients: A synthesis of the literature and new treatment directions. In L. K. Anderson, S. B. Murray, & W. H. Kaye (Eds.), *The Oxford handbook of atypical and complex eating disorders* (pp. 40-59). New York, NY: Oxford University Press. doi:10.1093/med-psych/9780190630409.001.0001
- 205. Tsai, J., Lee, C., Byrne, T., Pietrzak, R. H., & Southwick, S. M. (2017). Changes in public attitudes and perceptions about homelessness between 1990 and 2016. *American Journal of Community Psychology, 60*, 599-606. doi:10.1002/ajcp.12198
- 206. Tsai, J., Shen, J., Southwick, S. M., Greenberg, S., Pluta, A., & Pietrzak, R. H. (2018). Public attitudes and literacy about posttraumatic stress disorder. *Journal of Anxiety Disorders*, 55, 63-69. doi:10.1016/j.janxdis.2018.02.002
- 207. Tsai, J., Trevisan, L., Huang, M., & Pietrzak, R. H. (2018). Addressing veteran homelessness to prevent veteran suicides. *Psychiatric Services*, 69, 935-937. doi:10.1176/appi.ps.201700482

- Uchida, M., Feng, H., Feder, A., Mota, N., Schechter, C., Woodworth, H., Kelberman, C., Crane, M., Landrigan, P., Moline, J., Udasin, I., Harrison, D., Luft, B., Katz, C., Southwick, S. M., & Pietrzak, R. H. (2018). Parental posttraumatic stress and child behavioral problems in World Trade Center responders. *American Journal of Industrial Medicine*, *61*, 504-514. doi:10.1002/ ajim.22838
- 209. Vasterling, J. J., & Arditte Hall, K. (2018). Neurocognitive and information processing biases in posttraumatic stress disorder. *Current Psychiatry Reports, 20*, 99. doi:10.1007/s11920-018-0964-1
- 210. Vasterling, J. J., Jacob, S., & Rasmusson, A. M. (2018). Traumatic brain injury and posttraumatic stress disorder: Conceptual, diagnostic, and therapeutic considerations in the context of co-occurrence. *Journal of Neuropsychiatry* and Clinical Neurosciences, 30, 91-100. doi:10.1176/appi. neuropsych.17090180
- 211. Vogt, D., Perkins, D. F., Copeland, L. A., Finley, E. P., Jamieson, C. S., Lederer, S., & Gilman, C. L. (2018). The Veterans Metrics Initiative Study of U.S. veterans' experiences during their transition from military service. *BMJ Open*, *8*, e020734. doi:10.1136/bmjopen-2017-020734
- 212. **Vojvoda, D.**, Stefanovics, E., & Rosenheck, R. A. (2017). Psychotropic medication prescribing in Iraq/Afghanistan veterans and Vietnam era veterans with posttraumatic stress disorder. *The Journal of Nervous and Mental Disease, 205*, 848-854. doi:10.1097/NMD.00000000000755
- 213. Vujanovic, A., Farris, S., Bartlett, B., Lyons, R., Haller, M., Colvonen, P., & Norman, S. B. (2018). Anxiety sensitivity in the association between posttraumatic stress and substance use disorders: A systematic review. *Clinical Psychology Review*, 62, 37-55. doi:10.1016/j.cpr.2018.05.003
- 214. Wachen, J. S., Dondanville, K. A., & Resick, P. A. (2017). Correcting misperceptions about Cognitive Processing Therapy to treat moral injury: A response to Gray and colleagues. *Cognitive and Behavioral Practice, 24*, 388-392. doi:10.1016/j. cbpra.2017.06.001
- 215. Watkins, L. E., Han, S., Krystal, J. H., Southwick, S. M., Gelernter, J., & Pietrzak, R. H. (2017). Association between functional polymorphism in neuropeptide Y gene promoter rs16147 and resilience to traumatic stress in U.S. military veterans. *Journal of Clinical Psychiatry*, 78, e1058-e1059. doi:10.4088/JCP.17I11646
- 216. Watkins, L. E., Sippel, L. M., Pietrzak, R. H., Hoff, R., & Harpaz-Rotem, I. (2018). Clinically significant change in posttraumatic stress disorder symptoms is associated with lower levels of aggression after residential treatment discharge. *Journal of Traumatic Stress*, 31, 265-272. doi:10.1002/jts.22275
- 217. **Watson, P.** (2017). Early interventions for trauma-related problems. In R. J. Ursano, C. S. Fullerton, L. Weisaeth, & B. Raphael (Eds.), *Textbook of disaster psychiatry (2nd ed.)* (pp. 87-100). New York, NY: Cambridge University Press.
- 218. Weathers, F., Bovin, M. J., Lee, D. J., Sloan, D. M., Schnurr, P. P., Kaloupek, D. G., Keane, T. M., & Marx, B. P. (2018). The Clinician-Administered PTSD Scale for DSM–5 (CAPS-5): Development and initial psychometric evaluation in military veterans. *Psychological Assessment, 30*, 383-395. doi:10.1037/ pas0000486

- Weiss, B. J., Azevedo, K. J., Webb, K., Gimeno, J., & Cloitre, M. (2018). Telemental health delivery of Skills Training in Affective and Interpersonal Regulation (STAIR) for rural women veterans who have experienced military sexual trauma. *Journal of Traumatic Stress*, *31*, 620-625. doi:10.1002/jts.22305
- 220. Wiltsey Stirman, S. (2018). Future directions for practice-based research. In R. T. Codd III (Ed.), *Practice-Based research: A guide for clinicians* (pp. 243-249). New York, NY: Taylor & Francis/ Routledge Press.
- 221. Wiltsey Stirman, S., Gamarra, J. M., Bartlett, B. A., Calloway, A., & Gutner, C. A. (2017). Empirical examinations of modifications and adaptations to evidence-based psychotherapies: Methodologies, impact, and future directions. *Clinical Psychology: Science and Practice, 24*, 396-420. doi:10.1111/ cpsp.12218
- 222. Wiltsey Stirman, S., Gutner, C. A., Suvak, M. K., Adler, A., Calloway, A., & Resick, P. (2018). Homework completion, patient characteristics, and symptom change in Cognitive Processing Therapy for PTSD. *Behavior Therapy, 49*, 741-755. doi:10.1016/j. beth.2017.12.001
- 223. Wiltsey Stirman, S., Marques, L., Creed, T. A., Gutner, C. A., DeRubeis, R., Barnett, P. G., Kuhn, E. R., Suvak, M., Owen, J. E., Vogt, D., Jo, B., Schoenwald, S., Johnson, C. M., Mallard, K. N., Beristianos, M., & La Bash, H. (2018). Leveraging routine clinical materials and mobile technology to assess CBT fidelity: The innovative methods to assess psychotherapy practices (imAPP) study. *Implementation Science*, *13*, 69. doi:10.1186/ s13012-018-0756-3
- 224. Wisco, B. E., Marx, B. P., Miller, M. W., Wolf, E. J., Krystal, J. H., Southwick, S. M., & Pietrzak, R. H. (2017). A comparison of ICD-11 and DSM criteria for posttraumatic stress disorder in two national samples of U.S. military veterans. *Journal of Affective Disorder*, 223, 17-19. doi:10.1016/j.jad.2017.07.006
- 225. Wolf, E. J., Logue, M. W., Stoop, T., Schichman, S. A., Stone, A., Samimi Sadeh, N., Hayes, J. P., & Miller, M. W. (2018). Accelerated DNA methylation age: Associations with posttraumatic stress disorder and mortality. *Psychosomatic Medicine*, 80, 42-48. doi:10.1097/PSY.000000000000506
- 226. Wolf, E. J., Maniates, H., Nugent, N., Maihofer, A. X., Armstrong, D., Ratanatharathorn, A., Ashley-Koch, A. E., Garrett, M., Kimbrel, N. A., Lori, A., MIRECC Workgroup, M., Aiello, A. E., Baker, D. G., Beckham, J., Boks, M. P., Galea, S., Geuze, E., Hauser, M. A., Kessler, R. C., Koenen, K. C., Miller, M. W., Ressler, K. J., Risbrough, V., Stein, M. B., Ursano, R. J., Vermetten, E., Vinkers, C. H., Uddin, M., Smith, A. K., Nievergelt, C., & Logue, M. W. (2018). Traumatic stress and accelerated DNA methylation age: A meta-analysis. *Psychoneuroendocrinology*, *92*, 123-124. doi:10.1016/j. psyneuen.2017.12.007

- 227. Wolf, E. J., Miller, D. R., Logue, M. W., Sumner, J., Stoop, T., Leritz, E., Hayes, J. P., Stone, A., Schichman, S., McGlinchey, R., Milberg, W., & Miller, M. W. (2017). Contributions of polygenic risk for obesity to PTSD-related metabolic syndrome and cortical thickness. *Brain, Behavior, and Immunity, 65*, 328-336. doi:10.1016/j.bbi.2017.06.001
- 228. Wolf, E. J., Miller, M. W., Sullivan, D. R., Amstadter, A. B., Mitchell, K. S., Goldberg, J., & Magruder, K. M. (2018). A classical twin study of PTSD symptoms and resilience: Evidence for a single spectrum of vulnerability to traumatic stress. *Depression* and Anxiety, 35, 132-139. doi:10.1002/da.22712
- 229. Woodward, S. H., Jamison, A. L., Gala, S. M., & Holmes, T. H. (2017). Canine companionship is associated with modification of attentional bias in posttraumatic stress disorder. *PLoS One*. doi:10.1371/journal.pone.0179912
- 230. Yu, J. S., **Kuhn, E. R.**, **Miller, K. E.**, & Taylor, K. L. (2018). Smartphone apps for insomnia: Examining existing apps' usability and adherence to evidence-based principles for insomnia management. *Translational Behavioral Medicine*. doi:10.1093/tbm/iby014
- 231. Zanos, P., Thompson, S. M., **Duman, R.**, Zarate, C. A., & Gould, T. D. (2018). Convergent mechanisms underlying rapid antidepressant action. *CNS Drugs, 32*, 197-227. doi:10.1007/ s40263-018-0492-x
- 232. Zhang, Z., Fanning, J., Ehrlich, D. B., Chen, W., Lee, D., & Levy, I. (2017). Distributed neural representation of saliency controlled value and category during anticipation of rewards and punishments. *Nature Communications*, 8, 1907. doi:10.1038/ s41467-017-02080-4
- 233. Ziobrowski, H. N., Sartor, C. E., Tsai, J., & Pietrzak, R. H. (2017). Gender differences in mental and physical health conditions in U.S. veterans: Results from the National Health and Resilience in Veterans Study. *Journal of Psychosomatic Research*, 101, 110-113. doi:10.1016/j.jpsychores.2017.08.011

Appendix E: Fiscal Year 2018 In Press and Advance Online Publications

- 1. **Abdallah, C., Sanacora, G., Duman, R.**, & **Krystal, J. H.** (2018). The neurobiology of depression, ketamine, and rapid-acting antidepressants: Is it glutamate inhibition or activation? *Pharmacology and Therapeutics*. Advance online publication. doi:10.1016/j.pharmthera.2018.05.010
- Ahern, T. P., Farkas, D. K., Jiang, T., Lash, T. L., Veres, K., Sørensen, H. T., & Gradus, J. L. (in press). Adjustment disorder and typespecific cancer incidence: A Danish nationwide cohort study. *Acta Oncologica*.
- 3. Akiki, T., & Abdallah, C. (in press). Are there effective psychopharmacological treatments for PTSD? *Journal of Clinical Psychiatry*.
- Akiki, T., Averill, C. L., Wrocklage, K. M., Scott, J. C., Averill, L., Schweinsburg, B., & Abdallah, C. (2018). Topology of brain functional connectivity networks in posttraumatic stress disorder. *Data in Brief*. Advance online publication. doi:10.1016/j. dib.2018.08.198
- Amara, J., Stolzmann, K., Iverson, K. M., & Pogoda, T. K. (2018). Predictors of employment status in male and female post-9/11 veterans evaluated for traumatic brain injury. *Journal of Head Trauma and Rehabilitation*. Advance online publication. doi:10.1097/HTR.00000000000404
- Arditte Hall, K., Healy, E., & Galovski, T. E. (in press). The sequelae of sexual assault. In W. O'Donohue, P. Schewe, & C. Cummings (Eds.), *Handbook of sexual assault and sexual assault* prevention. New York, NY: Springer.
- Armstrong, C. M., Ortigo, K. M., Avery-Leaf, S., & Hoyt, T. (in press). Cultural considerations in using mobile health in clinical care with military and veteran populations. *Psychological Services*.
- Aronson, K. R., Perkins, D. F., Morgan, N., Bleser, J., Davenport, J., Vogt, D., Copeland, L. A., Finley, E. P., & Gilman, C. L. (in press). Going it alone: Post-9/11 veteran non-use of healthcare and social service programs during their early transition to civilian life. Journal of Social Service Research.
- Averill, L., Smith, N. B., Holens, P. A., Sippel, L. M., Bellmore, A. R., Mota, N. P., Sareen, J., Southwick, S. M., & Pietrzak, R. H. (in press). Sex differences in risk and resilience factors associated with military sexual trauma in U.S. veterans: Results from the National Health and Resilience in Veterans Study. *Journal of Aggression, Maltreatment, and Trauma*.
- Avery, T., Blasey, C., Rosen, C. S., & Bayley, P. (2018). Psychological flexibility and set-shifting among veterans participating in a yoga program: A pilot study. *Military Medicine*. Advance online publication. doi:10.1093/milmed/usy045

- Barnes, J. B., Presseau, C., Jordan, A. H., Kline, N. K., Young-McCaughan, S., **Keane, T. M.**, Peterson, A. L., Litz, B. T., Consortuim to Alleviate PTSD, **Abdallah, C.**, **Averill, L.**, Bryan, C. J., Cigrang, J. A., Fox, P. T., Fredman, S. J., **Krystal, J. H.**, McGeary, D. C., McDevitt-Murphy, M. E., Pruiksma, K. E., Resick, P. A., Roache, J. D., & Taylor, D. J. (2018). Common data elements in the assessment of military-related PTSD research applied in the consortium to alleviate PTSD. *Military Medicine*. Advance online publication. doi:10.1093/milmed/usy226
- 12. Batchelder, A. W., Safren, S., Coleman, J., Boroughs, M. S., Thiim, A., Ironson, G., **Shipherd, J. C.**, & O'Cleirigh, C. (in press). Indirect effects from childhood sexual abuse severity to PTSD: The role of avoidance coping. *Journal of Interpersonal Violence*.
- 13. Blonigen, D. M., Harris-Olenak, B., Haber, J. R., **Kuhn, E. R.**, Timko, C., Humphreys, K., & Dulin, P. (in press). Customizing the content and delivery of a clinical app to treat hazardous drinking among veterans in primary care: The Low-Threshold Intervention. *Psychological Services*.
- Bovin, M. J., Miller, C. J., Koenig, C. J., Lipschitz, J. M., Zamora, K. A., Wright, P. B., Pyne, J. M., & Burgess, J. F. (2018). Veterans' experiences initiating VA-based mental health care. *Psychological Services*. Advance online publication. doi:10.1037/ ser0000233
- Brady, C. B., Pless Kaiser, A., Spiro, A., King, D. W., & King, L. A. (2018). Late-Onset Stress Symptomatology (LOSS) scale – short form: Development and validation. *Aging and Mental Health*. Advance online publication. doi:10.1080/13607863.2018.1450 831
- Brake, A. C., Adams, T., Hood, C. O., & Badour, C. L. (in press). Posttraumatic mental contamination and the interpersonal therapy of suicide: Effects of DSM-5 PTSD symptom clusters on perceived burdensomeness and thwarted belongingness. *Cognitive Research and Therapy*.
- Brennan, P. L., **Greenbaum, M. A.**, Lemke, S., & Schutte, K. K. (2018). Mental health disorder, pain, and pain treatment among long-term care residents: Evidence from the Minimum Data Set 3.0. *Aging & Mental Health*. Advance online publication. doi:10.1 080/13607863.2018.1481922
- Brownlow, J. A., Miller, K. E., Gehrman, P. R., & Ross, R. J. (in press). Trauma- and stressor-related disorders. In A. Chopra, P. Das, & K. Doghramji (Eds.), *Management of sleep disorders in psychiatry*. New York, NY: Oxford University Press.
- Buchholz, K., Feingold, Z., & Galovski, T. E. (in press). Etiology and phenomenology of posttraumatic stress disorder. In B. Olatunji (Ed.), *Handbook of anxiety and related disorders*. Cambridge, UK: Cambridge University Press.

- 20. Bullman, T., Schneiderman, A., & **Gradus, J. L.** (2018). Relative importance of posttraumatic stress disorder and depression in predicting risk of suicide among a cohort of Vietnam veterans. *Suicide and Life-Threatening Behavior*. Advance online publication. doi:10.1111/sltb.12482
- Capone, C., Presseau, C., Saunders, E., Eaton, E., Hamblen, J. L., & McGovern, M. (2018). Is integrated CBT effective in reducing PTSD symptoms and substance use in Iraq and Afghanistan veterans? Results from a randomized clinical trial. *Cognitive Therapy and Research*. Advance online publication. doi:10.1007/ s10608-018-9931-8
- Carleton, R. N., Afifi, T. O., Turner, S., Taillieu, T., LeBouthillier, D. M., Duranceau, S., Sareen, J., Ricciardelli, R., MacPhee, R. S., Groll, D., Hozempa, K., Brunet, A., Weekes, J. R., Griffiths, C. T., Abrams, K. J., Jones, N. A., Beshai, S., Cramm, H. A., Dobson, K. S., Hatcher, S., **Keane, T. M.**, & Stewart, S. H. (2018). Suicidal ideation, plans, and attempts among public safety personnel in Canada. *Canadian Psychology*. Advance online publication. doi:10.1037/ cap0000136
- Cheng, Z., Zhou, H., Sherva, R., Farrer, L., Kranzler, H. R., & Gelernter, J. (2018). Genome-wide association study identifies a regulatory variant of RGMA associated with opioid dependence in European Americans. *Biological Psychiatry*. Advance online publication. doi:10.1016/j.biopsych.2017.12.016
- 24. **Cloitre, M., Khan, C. T., Mackintosh, M. A., Garvert, D.**, Falvey, E., & Saito, J. (2018). Emotion regulation mediates the relationship between ACES and physical and mental health. *Psychological Trauma: Theory, Research, Practice, and Policy.* Advance online publication. doi:10.1037/tra0000374
- Cloitre, M., Shevlin, M., Brewin, C. R., Bisson, J. I., Roberts, N. P., Maercker, A., Karatzias, T., & Hyland, P. (2018). The International Trauma Questionnaire: Development of a self-report measure of ICD-11 PTSD and complex PTSD. *Acta Psychiatrica Scandinavica*. Advance online publication. doi:10.1111/acps.12956
- Colvonen, P., Ellison, J., Haller, M., & Norman, S. B. (2018). Examining insomnia and PTSD over time in veterans in residential treatment for substance use disorders and PTSD. *Behavioral Sleep Medicine*. Advance online publication. doi:10.10 80/15402002.2018.1425869
- 27. Connolly, S., **Stoop, T., Logue, M. W.**, Orr, E. H., De Vivo, I., **Miller, M. W.**, & **Wolf, E. J.** (in press). Posttraumatic stress disorder symptoms, temperament, and the pathway to cellular senescence. *Journal of Traumatic Stress*.
- Cook, J., & Simiola, V. (2018). Trauma and aging. Current Psychiatry Reports. Advance online publication. doi:10.1007/ s11920-018-0943-6
- Cook, J., Thompson, R., Simiola, V., Wiltsey Stirman, S., & Schnurr, P. P. (in press). General attitudes versus specific provider perceptions of evidence-based psychotherapies for PTSD: A national investigation. *Psychological Services*.
- Dardis, C., Reinhardt, K. M., Foynes, M. M., Medoff, N. E., & Street, A. E. (in press). "Who are you going to tell? Who's going to believe you?": Women's experiences disclosing military sexual trauma. *Psychology of Women Quarterly*.
- DeViva, J. C., McCarthy, E., Bieu, R. K., Santoro, G. M., Rinaldi, A., Gehrman, P. R., & Kulas, J. (2018). Group cognitive-behavioral therapy for insomnia delivered to veterans with posttraumatic stress disorder receiving residential treatment is associated with improvements in sleep independent of changes in posttraumatic stress disorder. *Traumatology*. Advance online publication. doi:10.1037/trm0000152

- 32. **Doran, J.**, O'Shea, M., & **Harpaz-Rotem, I.** (in press). In their own words: Clinician experiences and challenges in administering evidence-based treatments for PTSD in the Veterans Health Administration. *Psychiatric Quarterly*.
- 33. **Dutra, S.**, & **Marx, B. P.** (in press). Assessment of PTSD in substance-using individuals. In A. A. Vujanovic & S. Back (Eds.), *Posttraumatic stress and substance use disorders: A comprehensive clinical handbook*. London, UK: Routledge Press.
- 34. **Dutra, S., Hayes, J. P.**, & **Keane, T. M.** (in press). Issues in assessment of PTSD in military personnel. In B. A. Moore & W. A. Penk (Eds.), *Treating PTSD in military personnel: A clinical handbook*. New York, NY: Guilford Press.
- Dutra, S., Lee, D. J., Marx, B. P., & Keane, T. M. (in press). Assessment of posttraumatic stress disorder. In D. M. Benedek & G. H. Wynn (Eds.), *Clinical manual for assessment of PTSD*. Washington, DC: American Psychiatric Press.
- 36. Finley, E. P., Mader, M., Haro, E. K., Noël, P. H., Bernardy, N. C., Rosen, C. S., Bollinger, M. J., Garcia, H. A., Sherrieb, K., & Pugh, M. J. (2018). Use of guideline-recommended treatments for PTSD among community-based providers in Texas and Vermont: Implications for the Veterans Choice Program. *The Journal of Behavioral Health Services & Research*. Advance online publication. doi:10.1007/s11414-018-9613-z
- Foa, E. B., Zandberg, L., McLean, C. P., Rosenfield, D., Fitzgerald, H., Tuerk, P. W., Wangelin, B. C., Young-McCaughan, S., & Peterson, A. L. (2018). The efficacy of 90-minute versus 60-minute sessions of Prolonged Exposure for posttraumatic stress disorder: Design of a randomized controlled trial in active duty military personnel. *Psychological Trauma: Theory, Research, Practice, and Policy*. Advance online publication. doi:10.1037/ tra0000351
- Fox, A. B., Earnshaw, V. A., Taverna, E., & Vogt, D. (2017). Conceptualizing and measuring mental illness stigma: The mental illness stigma framework and critical review of measures. *Stigma and Health*. Advance online publication. doi:10.1037/ sah0000104
- 39. **Friedman, M. J.** (2018). Posttraumatic stress disorder in primary care practice. *JAMA Internal Medicine*. Advance online publication. doi:10.1001/jamainternmed.2018.3108
- Fuehrlein, B. S., Kachadourian, L., Krystal, J. H., Southwick, S. M., & Pietrzak, R. H. (in press). Longitudinal predictors of hazardous drinking trajectories: Results from the National Health and Resilience in Veterans Study. *The American Journal on Addictions*.
- Gandelman, E., Petrakis, I., Kachadourian, L., & Ralevski, E. (2018). Negative affect intensity and hostility in individuals with alcohol use disorder with or without posttraumatic stress disorder. *Journal of Dual Diagnosis*. Advance online publication. doi:10.1080/15504263.2018.1434264
- 42. Gaska, K., & **Kimerling, R.** (in press). Patterns of adverse experiences and health outcomes among women veterans. *American Journal of Preventative Medicine*.
- 43. Gelkopf, M., Greene, T., Lapid Pickman, L., & **Carlson, E. B.** (in press). The dynamic relationship of peritraumatic phenomena: An experience sampling study during wartime. *Journal of Traumatic Stress*.
- Gerber, M. R., Bogdan, K., Haskell, S. G., & Scioli-Salter, E. R. (2018). Experience of Childhood Abuse and Military Sexual Trauma Among Women Veterans with Fibromyalgia. *Journal* of General Internal Medicine. Advance online publication. doi:10.1007/s11606-018-4594-4

- 45. Godleski, S., Eiden, R., & **Kachadourian, L.** (in press). Etiological pathways to rejection sensitivity in a high-risk sample. *Personality and Social Psychology Bulletin*.
- 46. Gould, C. E., Kok, B. C., Ma, V. K., **Owen, J. E.**, & **Kuhn, E. R.** (in press). Veterans Affairs and Department of Defense mental health apps: A systematic review of the available evidence. *Psychological Services*.
- Hamblen, J. L., Grubaugh, A. L., Davidson, T. M., Bunnell, B. E., & Ruggiero, K. J. (2018). An online peer educational campaign to reduce stigma and improve help seeking in veterans with posttraumatic stress disorder. *Telemedicine and e-Health*. Advance online publication. doi:10.1089/tmj.2017.0305
- Harik, J. M., Hamblen, J. L., Norman, S. B., & Schnurr, P. P. (in press). Evidence-based psychotherapies for adults with PTSD. In D. M. Benedek, R. J. Ursano, F. Stoddard, & M. Milad (Eds.), *Trauma and stressor related disorders*. Oxford, England: Oxford University Press.
- 49. Hundt, N. E., Harik, J. M., Thompson, K. E., Barrera, T. L., & Reynolds-Miles, S. (2017). Increased utilization of Prolonged Exposure and Cognitive Processing Therapy over time: A case example from a large Veterans Affairs posttraumatic stress disorder clinic. *Psychological Services*. Advance online publication. doi:10.1037/ser0000138
- Huston, J. C., Iverson, K. M., & Mitchell, K. S. (2018). Associations between healthcare use and disordered eating among female veterans. *International Journal of Eating Disorders*. Advance online publication. doi:10.1002/eat.22885
- Hyland, P., Shevlin, M., Cloitre, M., Karatzias, T., Vallières, F., McGinty, G., Fox, R., & Powers, J. C. (2018). Quality not quantity: Loneliness subtypes, psychological trauma, and mental health in the U.S. adult population. *Social Psychiatry and Psychiatric Epidemiology*. Advance online publication. doi:10.1007/s00127-018-1597-8
- Jackson, C., Weiss, B. J., & Cloitre, M. (2018). STAIR group treatment for veterans with PTSD: Efficacy and impact of gender on outcome. *Military Medicine*. Advance online publication. doi:10.1093/milmed/usy164
- Japuntich, S., Arditte Hall, K., Joos, C., Rasmusson, A. M., & Pineles, S. L. (2018). Methods to reduce false reporting of substance abstinence in clinical research. *International Journal* of *Methods in Psychiatric Research*. Advance online publication. doi:10.1002/mpr.1603
- Jensen, K., Valentine, G. W., Buta, E., DeVito, E., Gelernter, J., & Sofuoglu, M. (2018). Biochemical, demographic, and selfreported tobacco-related predictors of the acute heart rate response to nicotine in smokers. *Pharmacology Biochemistry and Behavior*. Advance online publication. doi:10.1016/j. pbb.2018.08.004
- Jiang, T., Veres, K., Körmendiné Farkas, D., Lash, T., Toft Sørensen, H., & Gradus, J. L. (2018). Post-traumatic stress disorder and incident fractures in the Danish population. *Osteoporosis International*. Advance online publication. doi:10.1007/s00198-018-4644-0
- Johnson, D. P., Salters-Pedneault, K., & Shipherd, J. C. (in press). Conceptualizing acceptance in postdeployment soldiers. *Journal of Psychopathology and Behavioral Assessment.*
- Jordan, J. T., Samuelson, K. W., & Tiet, Q. Q. (in press). Impulsivity, painful and provocative events, and suicide intent: Testing the Interpersonal Theory of Suicide. *Suicide and Life-Threatening Behavior*. doi:10.1111/sltb.12518

- Karatzias, T., Hyland, P., Bradley, A., Fyvie, C., Logan, K., Easton, P., Thomas, J., Philips, S., Bisson, J., Roberts, N. P., Cloitre, M., & Shevlin, M. (2018). Is self-compassion a worthwhile therapeutic target for ICD-11 complex PTSD (CPTSD)? *Behavioural and Cognitive Psychotherapy*. Advance online publication. doi:10.1017/S1352465818000577
- 59. Katon, J. G., Zephyrin, L., Meoli, A., Hulugalle, A., Bosch, J., Callegari, L., Galvin, I. V., Gray, K., Haeger, K., Hoffmire, C., Silvina, S., Ma, E., Mccabe-Beane, H., Nillni, Y. I., Pineles, S. L., Savitz, D. A., Shaw, J. G., & Patton, E. W. (in press). Reproductive health of women veterans: A systematic review of the literature from 2008 to 2017. Seminars in Reproductive Medicine and Reproductive Health of Women Service Members and Veterans.
- Kilpatrick, D., Friedman, M. J., & Gilmore, A. K. (in press). Classification and descriptive psychopathology of posttraumatic stress disorder and other stressor-related disorders. In J. Geddes, G. Doodwin, & N. Andreasen (Eds.), *New Oxford textbook of psychiatry (3rd ed.)*. Oxford, England: Oxford University Press.
- Kimerling, R., Allen, M., & Duncan, L. (2018). Chromosomes to social contexts: Sex and gender differences in PTSD. *Current Psychiatry Reports*. Advance online publication. doi:10.1007/ s11920-018-0981-0
- Kleiman, S., Bovin, M. J., Black, S. K., Rodriguez, P., Brown, L. G., Brown, M., Lunney, C. A., Weathers, F. W., Schnurr, P. P., Spira, J. L., Keane, T. M., & Marx, B. P. (2018). Psychometric properties of a brief measure of posttraumatic stress disorder-related impairment: The Brief Inventory of Psychosocial Functioning. *Psychological Services*. Advance online publication. doi:10.1037/ ser0000306
- 63. **Krystal, J. H.** (in press). The neuroscience of psychiatry. In B. J. Sadock, V. Sadock, & P. Ruiz (Eds.), *Kaplan and Sadock's comprehensive textbook of psychiatry, 10th ed.* New York, NY: Lippincott Williams & Wilkins.
- Lee, D. J., Bovin, M. J., Weathers, F. W., Schnurr, P. P., Palmieri, P. A., Sloan, D. M., Keane, T. M., & Marx, B. P. (2018). Latent factor structure of DSM-5 posttraumatic stress disorder: Evaluation of method variance and construct validity of novel symptom clusters. *Psychological Assessment*. Advance online publication. doi:10.1037/pas0000642
- Lee, D. J., Thompson-Hollands, J., Strage, M., Marx,
 B. P., Unger, W., Beck, J. G., & Sloan, D. M. (2018). Latent factor structure and construct validity of the cognitive emotion regulation questionnaire-short form among two PTSD samples. *Assessment*. Advance online publication. doi:10.1177/1073191118791301
- 66. **Maskin, R., Iverson, K. M., Vogt, D.**, & **Smith, B. N.** (in press). Associations between intimate partner violence victimization and employment-related outcomes in male and female veterans of the wars in Iraq and Afghanistan. *Psychological Trauma: Theory, Research, Practice and Policy.*
- 67. McFarland, C., & **Vasterling, J. J.** (2017). Prospective memory in depression: Review of an emerging field. *Archives of Clinical Neuropsychology*. Advance online publication. doi:10.1093/ arclin/acx118
- McGuire, A. P., Mota, N., Sippel, L. M., Connolly, K., & Lyons, J. (2018). Increased resilience is associated with positive treatment outcomes for veterans with comorbid PTSD and substance use disorders. *Journal of Dual Diagnosis*. Advance online publication. doi:10.1080/15504263.2018.1464237

- Meffert, B., Morabito, D. M., Sawicki, D. A., Hausman, C., Southwick, S. M., Pietrzak, R. H., & Heinz, A. J. (in press). U.S. Veterans who do and do not utilize VA healthcare services: Demographic, military, medical, and psychosocial characteristics. *The Primary Care Companion for CNS Disorders*.
- Meyer, E. C., La Bash, H., DeBeer, B., Kimbrel, N. A., Gulliver, S. B., & Morissette, S. B. (2018). Psychological inflexibility predicts PTSD symptom severity in war veterans after accounting for established PTSD risk factors and personality. *Psychological Trauma: Theory, Research, Practice, and Policy*. Advance online publication. doi:10.1037/tra0000358
- 71. **Miller, M. W.** (2018). Leveraging genetics to enhance the efficacy of PTSD pharmacotherapies. *Neuroscience Letters*. Advance online publication. doi:10.1016/j.neulet.2018.04.039
- Mitchell, K. S., Wolf, E. J., Lyons, M. J., Goldberg, J., & Magruder, K. M. (2018). A co-twin control study of the association between combat exposure, PTSD, and obesity in male veterans. *Psychological Medicine*. Advance online publication. doi:10.1017/ S0033291718001514
- 73. Monson, C., Shields, N., Suvak, M., Lane, J., Schnaider, P., Wagner, A., Masina, T., Landy, M., & Wiltsey Stirman, S. (in press). A randomized controlled trial of training and consultation methods to deliver cognitive processing therapy for posttraumatic stress disorder: Impact on patient outcomes. *Behaviour Research and Therapy*.
- 74. Morrison, F. G., Miller, M. W., Wolf, E. J., Logue, M. W., Maniates, H., Kwasnik, D., Svirsky, S., Restaino, A., Hildebrandt, A., Aytan, N., Stein, T. D., Alvarez, V. E., McKee, A. C., Study Group, B., & Huber, B. (in press). Reduced interleukin 1A gene expression in the dorsolateral prefrontal cortex of individuals with PTSD and depression. *Neuroscience Letters*.
- 75. Murdoch, M., Partin, M., Vang, D., & **Kehle-Forbes, S.** (in press). The psychological risk of minimal risk activities: A pre- and post-test study using the self-assessment manikin. *Journal of Empirical Research on Human Research Ethics*.
- Myers, U. S., Haller, M., Angkaw, A. C., Harik, J. M., & Norman, S. B. (2018). Evidence-based psychotherapy completion and symptom improvement among returning combat veterans with PTSD. *Psychological Trauma: Theory, Research, Practice, and Policy*. Advance online publication. doi:10.1037/tra0000360
- 77. Naeser, M., Martin, P. I., Ho, M. D., Krengel, M. H., Knight, J. A., Bogdanov, Y., Yee, M. K., Zafonte, R. O., Frazier, J. A., Hamblin, M. R., & Koo, B. B. (in press). Transcranial, red/near-infrared lightemitting diode (LED) therapy for chronic, traumatic brain injury. In M. R. Hamblin, T. Agrawal, & M. de Sousa (Eds.), *Handbook of low-level laser therapy*. Boca Raton, FL: Pan Stanford Publishing.
- 78. **Negreira, A.**, & **Abdallah, C.** (in press). A review of fMRI affective processing paradigms used in the neurobiological study of PTSD. *Chronic Stress*.
- Niles, B. L., Polizzi, C. P., Voelkel, E., Weinstein, E. S., Smidt, K., & Fisher, L. M. (2017). Initiation, dropout, and outcome from evidence-based psychotherapies in a VA PTSD outpatient clinic. *Psychological Services*. Advance online publication. doi:10.1037/ ser0000175
- Nillni, Y. I., Mehralizade, A., Mayer, L., & Milanovic, S. (2018). Treatment of depression, anxiety, and trauma-related disorders during the perinatal period: A systematic review. *Clinical Psychology Review*. Advance online publication. doi:10.1016/j. cpr.2018.06.004

- O'Connor, A. A., Herbst, E., Leach, B., Armstrong, K., Graham, B. C., Jersky, B., & McCaslin, S. E. (2018). Student veterans with posttraumatic stress symptoms: Perceived preferences for on-campus psychoeducation. *Psychiatric Rehabilitation Journal*. Advance online publication. doi:10.1037/prj0000306
- 82. **Parker-Guilbert, K., Moshier, S. J., Marx, B. P.**, & **Keane, T. M.** (in press). Measures of PTSD symptom severity. In C. B. Nemeroff & C. R. Marmar (Eds.), *Post-traumatic stress disorder*. New York, NY: Oxford University Press.
- Perkins, D. F., Aronson, K. R., Morgan, N., Bleser, J., Vogt, D., Copeland, L. A., Finley, E. P., & Gilman, C. L. (in press). Veterans' use of programs and services as they transition to civilian life: Baseline assessment for the Veteran Metrics Initiative. *Journal of Social Service Research*.
- 84. **Pineles, S. L.**, & Borba, C. P. (in press). A path towards effectively investigating the impact of sex and gender on mental health. *Gender and Mental Health Special Issue of Clinical Psychology Review*.
- 85. **Pineles, S. L.**, & Orr, S. P. (in press). Psychophysiology of PTSD. In C. B. Nemeroff & C. R. Marmar (Eds.), *Post-traumatic stress disorder*. New York, NY: Oxford University Press.
- 86. Poole, G., Creech, S. K., **Macdonald, A.**, & **Taft, C. T.** (in press). Predictors of session attendance in intimate partner violence treatment for trauma-exposed veterans. *Partner Abuse*.
- 87. Rosebrock, L. E., **Arditte Hall, K.**, Rando, A., **Pineles, S. L.**, & Liverant, G. I. (in press). Rumination and its relationship with thought suppression in unipolar depression and comorbid PTSD. *Cognitive Therapy and Research*.
- Rosellini, A., Stein, M., Benedek, D., Bliese, P., Chiu, W., Hwang, I., Monahan, J., Nock, M., Sampson, N., **Street, A. E.**, Zaslavsky, A., Ursano, R., & Kessler, R. (2018). Predeployment predictors of psychiatric disorder-symptoms and interpersonal violence during combat deployment. *Depression and Anxiety*. Advance online publication. doi:10.1002/da.22807
- Rozek, D. C., Keane, C., Sippel, L. M., Stein, J. Y., Rollo-Carlson, C., & Bryan, C. J. (2018). Short term effects of crisis response planning on optimism in a U.S. Army sample. *Early Intervention in Psychiatry*. Advance online publication. doi:10.1111/eip.12699
- 90. Samimi Sadeh, N., Spielberg, J. M., Logue, M. W., Hayes, J. P., Wolf, E. J., McGlinchey, R. E., Milberg, W. P., Schichman, S. A., Stone, A., & Miller, M. W. (in press). Linking genes, circuits, & behavior: Network connectivity as a novel endophenotype of externalizing. *Psychological Medicine*.
- Scherrer, J., Salas, J., Lustman, P., van den Berk-Clark, C., Schnurr, P. P., Tuerk, P., Cohen, B., Friedman, M. J., Norman, S. B., Schneider, F., & Chard, K. (2018). The role of obesity in the association between posttraumatic stress disorder and incident diabetes. *JAMA Psychiatry*. Advance online publication. doi:10.1001/jamapsychiatry.2018.2028
- Scioli-Salter, E. R., Smith, B. N., McSheffrey, S., Bair, M. J., Sillice, M., Driscoll, M., Higgins, D. M., Allsup, K., Amalathas, A., & Gerber, M. R. (2017). Self-efficacy for adoption and maintenance of exercise among fibromyalgia patients: A pilot study. *American Journal of Lifestyle Medicine*. Advance online publication. doi:10.1177/1559827617745264
- 93. Shiner, B., Westgate, C., Gui, J., Maguen, S., Young-Xu, Y., Schnurr, P. P., & Watts, B. V. (2018). A retrospective comparative effectiveness study of medications for posttraumatic stress disorder in routine practice. *Journal of Clinical Psychiatry*. Advance online publication. doi:10.4088/JCP.18m12145

- Silverstein, M. W., Lee, D. J., Seligowski, A. V., & Worley, C. W. (in press). Trauma-related functional impairment: The role of PTSD symptom severity, negative mood regulation and unmet interpersonal needs. *Traumatology*.
- 95. **Sippel, L. M., Watkins, L. E., Pietrzak, R. H., Hoff, R.**, & **Harpaz-Rotem, I.** (2018). The unique roles of emotional numbing and arousal symptoms in relation to social connectedness among military veterans in residential treatment for PTSD. *Psychiatry: Interpersonal and Biological Processes*. Advance online publication. doi:10.1080/00332747.2017.1395313
- 96. **Sloan, D. M.**, Unger, W., **Lee, D. J.**, & Beck, J. G. (in press). A randomized controlled trial of cognitive behavioral group treatment for veterans diagnosed with PTSD. *Journal of Traumatic Stress*.
- 97. Smith, L. J., Paulus, D. J., Gallagher, M. W., **Norman, S. B.**, Tran, J., & Vujanovic, A. A. (in press). Perceived stress and alcohol dependence in firefighters: The role of posttraumatic stress. *International Journal of Stress Management*.
- Smith, N., Monteith, L., Rozek, D., & Meuret, A. (2017). Childhood abuse, the interpersonal-psychological theory of suicide, and the mediating role of depression. *Suicide and Life-Threatening Behavior*. Advance online publication. doi:10.1111/sltb.12380
- Sripada, R. K., Hannemann, C. M., Schnurr, P. P., Marx, B. P., Pollack, S. J., & McCarthy, J. F. (2018). Mental health service utilization before and after receipt of a service connected disability award for PTSD: Findings from a national sample. *Health Services Research*. Advance online publication. doi:10.1111/1475-6773.12859
- 100. Straus, E., **Haller, M.**, Lyons, R. C., & **Norman, S. B.** (in press). Review of the functional and psychiatric correlates of comorbid posttraumatic stress disorder and alcohol use disorder. *Alcohol Research: Current Reviews*.
- 101. Street, A. E., Hilbert, A. J., Eliezer, D., Axelrad, S. H., Dyches, K. D., & Galbreath, N. W. (in press). Sexual assault in the military. In E. Weiss & C. Castro (Eds.), *American military life in the 21st century: Social, cultural, economic issues and trends (Vol. 1 - 2).* Santa Barbara, CA: Praeger/ABC-CLIO.
- 102. **Sullivan, D. R.** (in press). A cerebrovascular hypothesis of neurodegeneration in mTBI. *The Journal of Head Trauma Rehabilitation*.
- 103. Tamman, A. J. F., Sippel, L. M., Han, S., Neria, Y., Krystal, J. H., Southwick, S. M., Gelernter, J., & Pietrzak, R. H. (2017). Attachment style moderates effects of FKBP5 polymorphisms and childhood abuse on posttraumatic stress symptoms: Results from the National Health and Resilience in Veterans Study. World Journal of Biological Psychiatry. Advance online publication. doi: 10.1080/15622975.2017.1376114
- 104. Tiet, Q. Q., Duong, H. M., Davis, L., French, R., Smith, C. L., Levya, Y., & Rosen, C. S. (in press). PTSD Coach mobile application (app) with brief telephone support and pre- and post-intervention outcomes on PTSD, depressive symptoms and quality of life. *Psychological Services*.
- 105. Tucker, R. P., Testa, R. J., Simpson, T. L., **Shipherd, J. C.**, Blosnich, J. R., & Lehavot, K. (in press). Hormone therapy, gender affirmation surgery, and their association with recent suicidal ideation and depression symptoms in transgender veterans. *Psychological Medicine*.

- 106. Tucker, R., Testa, R., Reger, M., Simpson, T., Shipherd, J. C., & Lehavot, K. (2018). Current and military-specific gender minority stress factors and their relationship with suicide ideation in transgender veterans. *Suicide and Life-Threatening Behavior*. Advance online publication. doi:10.1111/sltb.12432
- 107. Valentine, S. E., & **Shipherd**, J. C. (in press). A systematic review of social stress and mental health among transgender and gender non-conforming people in the United States. *Clinical Psychology Review*.
- Valentine, S., Woulfe, J., & Shipherd, J. C. (in press). An evidencebased approach to conceptualizing trauma responses among transgender and gender non-conforming (TGNC) adults. In J. E. Pachankis & S. A. Safren (Eds.), *Handbook of evidence-based mental health practice with LGBT clients*. New York, NY: Oxford University Press.
- 109. Vasterling, J. J., Jacob, S., & Rasmusson, A. M. (in press). PTSD. In J. M. Silver, T. W. McAllister, & D. B. Archiniegas (Eds.), APA textbook of traumatic brain injury (3rd ed.). Arlington, VA: American Psychiatric Publishing.
- 110. Walser, R. D., & McGee-Vincent, P. (in press). How to develop your abilities as an ACT therapist. In P. Lucena-Santos, S. A. Carvalho, J. Pinto-Gouveia, M. S. Oliveira, & J. Pistorello (Eds.), Manual prático internacional de Terapia de Aceitação e Compromisso [International Practical Handbook of Acceptance and Commitment Therapy]. Novo Hamburgo, RS: Sinopsys.
- 111. Wells, S. Y., Talkovsky, A. M., Glassman, L. H., Chatfield, M. A., Morland, L. A., & **Mackintosh**, **M. A.** (in press). Improvements in sexual functioning following Cognitive Processing Therapy. *Women's Health Issues*.
- 112. Williams, A. M., **Galovski, T. E.**, & Resick, P. A. (in press). Cognitive Processing Therapy. In B. A. Moore & W. E. Penk (Eds.), *Treating PTSD in military personnel: A clinical handbook (2nd ed.)*. New York, NY: Guilford Press.
- 113. Wohleb, E. S., & **Duman, R.** (in press). Disruption of mTORC1 signaling contributes to synaptic deficits caused by chronic stress: Reversal by rapid-acting antidepressants. *Neurobiology of Stress*.
- 114. Wolf, E. J., Logue, M. W., Morrison, F. G., Wilcox, E., Stone, A., Schichman, S. A., McGlinchey, R. E., Milberg, W. P., & Miller, M. W. (2018). Posttraumatic psychopathology and the pace of the epigenetic clock: A longitudinal investigation. *Psychological Medicine*. Advance online publication. doi:10.1017/ S0033291718001411
- 115. Youngren, W. A., **Miller, K. E.**, & Davis, J. L. (2018). An assessment of medical practitioners' knowledge of, experience with, and treatment attitudes towards sleep disorders and nightmares. *Journal of Clinical Psychology in Medical Settings*. Advance online publication. doi:10.1007/s10880-018-9574-7
- 116. Zang, Y., Gay, N., Kaczkurkin, A. N., **McLean, C. P., Wachen, J. S.**, Yarvis, J. S., Foa, E. B., Resick, P. A., & STRONG STAR Consortium (in press). Factor structures and psychometric properties of the peritraumatic and posttraumatic emotions questionnaires among active duty military personnel with posttraumatic stress disorder. *Journal of Traumatic Stress*.
- 117. Zhornitsky, S., Ide, J., Wang, W., Chao, H., Zhang, S., Hu, S., Krystal, J. H., & Li, C. R. (2018). Problem drinking, alcohol expectancy and thalamic resting-state functional connectivity in non-dependent adult drinkers. *Brain Connectivity*. Advance online publication. doi:10.1089/brain.2018.0633

Appendix F: Fiscal Year 2018 Scientific Presentations

American Psychological Association | San Francisco, CA, August 2018

- 1. **Allen, M., Kimerling, R.**, & Gaska, K. Patterns of adversity predict social determinants of health among veteran women.
- Beristianos, M., Mallard, K. N., Song, J., Lane, J., Landy, M., Sheilds, N., Monson, C., & Wiltsey Stirman, S. An examination of Cognitive Processing Therapy consultation activities on fidelity and symptom change. In M. Beristianos (Chair), Effectiveness and implementation of evidence-based psychotherapies for trauma and PTSD.
- 3. **Beristianos, M., Tiet, Q. Q.**, & Byers, A. Trauma exposure and suicidal behavior: A moral injury perspective. In **M. Beristianos** (Chair), *Clinical factors in the treatment of posttraumatic stress disorder.*
- 4. Chan, S. L., & **Tiet, Q. Q.** Substance use, PTSD, and combat exposure among male veterans convicted of violent crimes.
- Cloitre, M., Ortigo, K. M., Lindsay, J., Crowley, J. J., Jackson, C., Mackintosh, M. A., Morabito, D. M., & Gimeno, J. Increasing engagement in mental health care among women veterans: Inhome delivery of an emotion regulation web-based program.
- Johnson, C. M., Dunlap, K. L., Lagdamen, J. M., Cohen, Z. D., Mallard, K. N., Shields, N., Monson, C., Wiltsey Stirman, S., & La Bash, H. The ESP scale: Can consultants divine clinician engagement and skill?
- 7. Fairbank, J. A., **Keane, T. M.**, Resick, P. A., **& Schnurr, P. P.** Personal perspectives. In D. Castillo (Chair), *Invited conversation hour: Evolution of PTSD as a diagnosis—Perspectives from experts in the field*.
- 8. **Kimerling, R., Allen, M.**, & Gaska, K. *Beyond revictimization: Constellations of adversities predict risk for past-year IPV.*
- 9. **La Bash, H.**, & Papa, T. Do trauma survivors experience shame after fear? An experimental examination. In **M. H. Beristianos** (Chair), *Clinical factors in the treatment of posttraumatic stress disorder.*

- Lagdamen, J. M., Johnson, C. M., Dunlap, K. L., Song, J., Cohen, Z. D., Mallard, K. N., Shields, N., Monson, C., Wiltsey Stirman, S., & La Bash, H. Does consultant perception of therapist skill and engagement during consultation calls accurately reflect or predict patient improvement?
- Mackintosh, M. A., Larsen, S., Evans, W., Suvak, M., Monson, C., & Wiltsey Stirman, S. Symptom exacerbations in a Cognitive Processing Therapy community sample. In M. Beristianos (Chair), *Clinical factors in the treatment of posttraumatic stress disorder.*
- Rosen, C. S., Clothier, B., Noorbaloochi, S., Smith, B. N., Orazem, R., & Sayer, N. Organizational factors associated with wider reach of evidence-based psychotherapies for PTSD. In M. Beristianos (Chair), Effectiveness and implementation of evidence-based psychotherapies for trauma and PTSD.
- 13. Sanghvi, R., Juhasz, K. M., Smith, B. N., Rosen, C. S., & McGee-Vincent, P. Technology and mental health care for veterans: A quality improvement project.
- 14. Shadi, S., & **Tiet, Q. Q.** The Brain Injury Isolation Scale (BIIS) measuring feelings of social isolation in people with brain injuries.
- 15. **Shipherd, J. C.** Understanding risk and resilience for suicidal ideation and attempts in transgender veterans. In K. Lehavot (Chair), *Understanding risk and resilience for suicidal ideation and attempts in transgender veterans.*
- 16. **Tiet, Q. Q.**, Duong, H., Davis, L., French, R., Smith, C., Leyva, Y., & **Rosen, C. S.** *Telephone support augmenting mobile app intervention among VA primary care patients with PTSD.*
- 17. Winzeler, B., **Tiet, Q. Q.**, Loewy, M., & Pardo, S. *The impact of PTSD* on mental health stigma in combat-exposed U.S. military veterans.
- Zimmerman, L. E., Mushiana, S., Yang, J., Kimerling, R., Rosen, C. S., Trafton, J., Holbrook, A., Rust, T., Park, S., & Lindley, S. Improving mechanisms of local EBP implementation to reach a greater proportion of patients.

Anxiety and Depression Association of America | Washington, DC, April 2018

- 19. **Abdallah, C.** *Ketamine as a tool: The path to a biologically defined psychiatric disorder.*
- 20. **Abdallah, C.** Ketamine treatment of refractory depression and PTSD: Underlying mechanisms and clinical utility. In **C. Abdallah** (Chair), *Ketamine treatment of refractory depression and PTSD: Underlying mechanisms and clinical utility.*
- 21. Averill, L., Averill, C. L., Akiki, T., Wrocklage, K. M., Scott, J. C., Schweinsburg, B., Southwick, S. M., Krystal, J. H., & Abdallah, C. Preliminary findings of altered cortical thickness in veterans with PTSD endorsing current suicidal ideation.
- 22. Bovin, M. J., Klein, A., Sanyal, S., Brown, M., Rosen, R. C., Keane, T. M., & Marx, B. P. Comparing PTSD diagnostic status according to DSM-IV versus DSM-5: How do concordant and discordant groups differ? In B. P. Marx (Chair), Understanding the nature and course of posttraumatic stress disorder symptoms: Implications of assessment and measurement strategies.
- 23. Gauthier, G. M., Moshier, S. J., Zax, A., Bovin, M. J., Keane, T. M., & Marx, B. P. Evaluating the association between cigarette smoking and suicide in veterans with PTSD.

(Anxiety and Depression Association of America, continued)

- 24. **Harpaz-Rotem, I.**, Jia, R., Gordon, C., Horvath, M., & **Levy**, **I.** *Neurobiological markers of uncertainty attitudes and PTSD symptom severity: An fMRI Investigation.*
- 25. Lee, D. J., Lee, L. O., Bovin, M. J., Green, J. D., Klein, A., Rosen, R. C., Keane, T. M., & Marx, B. P. Examination of the nature and longitudinal course of PTSD and depression symptoms among OEF/OIF veterans: Preliminary results from the Veterans After-Discharge Longitudinal Registry (Project VALOR). In B. P. Marx (Chair), Understanding the nature and course of posttraumatic stress disorder symptoms: Implications of assessment and measurement strategies.
- Moshier, S. J., Bovin, M. J., Kleiman, S., Lee, D. J., Sloan, D. M., Keane, T. M., & Marx, B. P. Performance of the PCL-5 relative to the CAPS-5 in the assessment of individual PTSD symptoms. In B. P. Marx (Chair), Understanding the nature and course of posttraumatic stress disorder symptoms: Implications of assessment and measurement strategies.
- Rosen, R. C., Trachtenberg, F., Bovin, M. J., Moshier, S. J., Ranganathan, G., Magnavita, A., Marx, B. P., & Keane, T. M. Trajectories of diagnosis and course of PTSD outcomes: Implications of assessment and measurement strategies using CART methodology.
- 28. **Sippel, L. M., Holtzheimer, P. E.**, McDonald, W., Rothbaum, B. O., & **Schnurr, P. P.** *Perspectives on defining treatment-resistant PTSD: Implications for research and clinical care.*
- 29. **Thompson-Hollands, J.**, Kritakanos, T. M., & DeVoe, E. Prevalence of couple aggression among recently deployed National Guard Service Member parents of young children and their partners.
- Zax, A., Moshier, S. J., Gauthier, G. M., Bovin, M. J., Keane, T. M., & Marx, B. P. Clinical correlates of the Childhood Trauma Questionnaire Minimization and Denial Subscale in a sample of OEF/OIF veterans.

Association for Behavioral and Cognitive Therapies | San Diego, CA, November 2017

- 31. Alpert, E., Barnes, J. B., Hayes, A., & **Sloan, D. M.** *Decentering* and other processes of change in Written Exposure Therapy and Cognitive Processing Therapy for PTSD.
- 32. Barnes, J. B., Hayes, A., & Sloan, D. M. Therapeutic processes in Written Exposure Therapy and Cognitive Processing Therapy. In D. M. Sloan (Chair), A randomized controlled trial of Written Exposure Therapy for PTSD: Outcomes, moderators, and mediators.
- 33. Beck, J. G., Unger, W., **Jun, J. J.**, Litwack, S., Spofford, C., Webber, A. T., & **Sloan, D. M.** The science is chasing the practice: Outcome of group CBT for chronic PTSD.
- 34. Chu, B. C., Newman, M. G., **Sloan, D. M.**, Comer, J. S., Hart, T. A., Kamholz, B. W., Khanna, M., Martell, C. R., & McHugh, R. K. *How* to get published in Cognitive and Behavioral Practice and Behavior Therapy.
- 35. Creech, S. K., Benzer, J., Ebalu, T., Murphy, C. M., & **Taft, C. T.** National implementation of a trauma-informed intervention to prevent and end intimate partner violence in the Department of Veterans Affairs: First year outcomes. In L. McGinn (Chair), *Novel targets and change mechanisms in prevention.*
- Creech, S. K., Benzer, J., Macdonald, A., Poole, G., Murphy, C. M., & Taft, C. T. PTSD symptoms predict outcome in traumainformed treatment of intimate partner aggression. In L. Sippel (Chair), Mechanisms and treatment of aggression: Novel findings and implications for CBT practice.
- 37. Curry, I., Lyons, R., & **Norman, S. B.** The impact of negative cognitions related to trauma on impairment of functioning due to pain.
- Ellison, J. M., Davis, B. C., & Norman, S. B. Examining insomnia and PTSD over time of veterans in residential treatment for substance use disorders.
- Fitzgerald, H., McLean, C. P., Zandberg, L., Roache, J. D., Pruiksma, K. E., Taylor, D. J., Dondanville, K. A., Litz, B. T., Mintz, J., Young-McCaughan, S., Yarvis, J. S., Peterson, A. L., Foa, E. B., & the STRONG STAR Consortium. *Caffeine use in military personnel with PTSD: Prevalence and impact on sleep*.
- 40. **Galovski, T. E.** Treating dysregulated anger in traumatized populations: Outreach along the continuum of care. In **M. A. Mackintosh** (Chair), *Treating dysregulated anger in traumatized populations: Outreach along the continuum of care.*

- 41. **Galovski, T. E.**, Farmer, C., & Gloth, C. Contributions and interactions between therapist skill and patient engagement in optimizing therapy outcomes. In **J. Wachen** & **B. Niles** (Chairs), *Factors influencing engagement with evidence-based psychotherapies for PTSD in diverse patient populations.*
- 42. Greene, C. J., **Mackintosh, M. A.**, & **Morland, L. A.** Leveraging technology to facilitate anger management therapies. In **M. A. Mackintosh** (Chair), *Treating dysregulated anger in traumatized populations: Outreach along the continuum of care.*
- 43. **Gutner, C. A.**, & **Wiltsey Stirman, S.** Shortening the science-toservice pipeline: Forming a tighter link between neuroscience and implementation science.
- 44. Hausman, C., **Meffert, B.**, Santiago, R., Sawicki, D., Song, E., & **Heinz, A. J.** *Impulsivity and cognitive flexibility as neuropsychological markers for suicide risk: A multi-modal investigation among military veterans with alcohol use disorder and PTSD*.
- Johnson, C. M., Mallard, K. N., Beristianos, M., Ramirez, V., Masina, T., Finley, E., Monson, C., La Bash, H., & Wiltsey Stirman, S. De-implementation of non-evidence-based practice: An underutilized step in implementation research.
- 46. **Kehle-Forbes, S.**, Polusny, M. A., Osei-Bonsu, P., & Lyon, A. Therapists' attitudes regarding their patients' dropout from Prolonged Exposure and Cognitive Processing Therapy.
- 47. Lyons, R., Curry, I., & **Norman, S. B.** Role of negative cognitions about the self across domains of functioning in treatment-seeking veterans with co-occurring PTSD and AUD.
- Mackintosh, M. A., Greene, C. J., & Morland, L. A. Treating dysregulated anger in traumatized populations: Outreach along the continuum of care. In M. A. Mackintosh (Chair), *Treating dysregulated anger in traumatized populations: Outreach along the continuum of care.*
- 49. **Mallard, K. N., Beristianos, M.**, Lane, J., **La Bash, H.**, Landy, M., Shields, N., Monson, C., & **Wiltsey Stirman, S.** Which elements of consultation in an evidence-based practice are associated with CPT fidelity and use. In E. Becker-Haimes (Chair), *Supporting clinicians to deliver CBT across routine clinical settings: Insights from implementation science.*

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- 50. **Marx, B. P., Sloan, D. M., Lee, D. J.**, & Resick, P. Moderators of PTSD treatment outcome: Findings from a noninferiority trial.
- 51. **Maskin, R., Vogt, D., Iverson, K. M.**, & **Smith, B. N.** Differential associations between physical, sexual, and psychological intimate partner violence and employment outcomes among female and male OEF/OIF veterans.
- 52. McLean, C. P., Zandberg, L., Brown, L., Zang, Y., Benhamou, K., Dondanville, K. A., Yarvis, J., Litz, B. T., Mintz, J., Young-McCaughan, S., Peterson, A. L., Foa, E. B., & the STRONG STAR Consortium. Guilt in the treatment of PTSD among active duty military personnel. In A. B. Jerud (Chair), Beyond PTSD: Farreaching effects of exposure-based PTSD treatment on common clinical complexities.
- Morland, L. A., Mackintosh, M. A., Willis, E. A., Glassman, L. H., Sohn, S., & Greene, C. J. How well do evidence-based PTSD treatments treat anger? In M. A. Mackintosh (Chair), Advances & innovation in treating anger and aggression in trauma exposed populations.
- Myers, U. S., Lyons, R., Siegel, E., Angkaw, A. C., & Norman, S. B. Does time-to-treatment impact engagement in evidence-based psychotherapy for PTSD?
- 55. Norman, S. B., Haller, M., Hamblen, J. L., & Pietrzak, R. H. Risk and resilience factors associated with PTSD in U.S. veterans with alcohol use disorder: Results from the National Health and Resilience in Veterans Study.
- 56. Sippel, L. M., & Marshall, A. D. An examination of attention bias to threat and in vivo aggression: The functional role of fear. In L. Sippel and L. Watkins (Chairs), *Mechanisms and treatment of* aggression: Novel findings and implications for CBT practice.

- 57. **Sloan, D. M., Marx, B. P., Lee, D. J.**, & Resick, P. A. A brief exposure based treatment for PTSD versus CPT: A randomized non-inferiority trial.
- Sloan, D. M., Unger, W., Lee, D. J., Jun, J. J., Litwack, S. D., Spofford, C., Urgelles, J., Webber, A. T., & Beck, J. G. Investigating the generalizing effects of PTSD group treatment: A trial with veterans. In A. B. Jerud (Chair), *Beyond PTSD: Far-reaching effects of exposure-based PTSD treatment on common clinical complexities*.
- 59. Smidt, K., Niles, B. L., Weinstein, E., & Fisher, L. M. The influence of intake sessions: Gearing patients up for trauma-focused evidence-based psychotherapies.
- 60. Wachen, J., Mintz, J., LoSavio, S. T., Dondanville, K. A., Yarvis, J. S., Peterson, A. L., Resick, P. A., & the STRONG STAR Consortium. Predictors of treatment engagement in Cognitive Processing Therapy for PTSD among active military. In J. Wachen (Chair), Factors influencing engagement with evidence-based psychotherapies for PTSD in diverse patient populations.
- 61. Watkins, L. E., **Sippel, L. M.**, **Pietrzak, R. H.**, **Hoff, R.**, & **Harpaz-Rotem, I.** Greater reductions in PTSD symptoms are related to lower levels of aggression after discharge from residential treatment for PTSD in veterans. In **L. M. Sippel** & L. E. Watkins (Chairs), *Mechanisms and treatment of aggression: Novel findings and implications for CBT practice.*
- 62. Weinstein, E., Smidt, K., Fisher, L. M., & Niles, B. L. Drop-out, outcome, and treatment patterns of veterans assigned to PTSD treatments: Atypical, complex cases.
- 63. Zandberg, L., Kaczkurkin, A., **McLean, C. P.**, Rescorla, L., Yadin, E., & Foa, E. B. Adolescent PTSD: Prolonged Exposure versus Client Centered Therapy on behavioral problems. In A. B. Jerud (Chair), *Beyond PTSD: Far-reaching effects of exposure-based PTSD treatment on common clinical complexities.*

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- 64. Dunlap, K. L., Johnson, C. M., Lagdamen, J. M., Cohen, Z. D., Mallard, K. N., Shields, N., Monson, C., Wiltsey Stirman, S., & La Bash, H. Improving consultation in real time: The ESP Scale.
- 65. **Heinz, A. J., Meffert, B., Sawicki, D. A.**, Blonigen, D., Wong, J., Timko, C., & Cronkite, R. *Employment characteristics, work environment, and the course of depression over 23 years: Does employment help foster resilience?*
- 66. Lagdamen, J. M., Johnson, C. M., Dunlap, K. L., Cohen, Z. D., Shields, N., Monson, C., Wiltsey Stirman, S., & La Bash, H. *Is* consultant perception of therapist skill and engagement during consultation associated with patient outcomes?
- 67. **Meffert, B., Morabito, D. M.**, Sawicki, D. A., **Regala, S. L.**, Hausman, C., **Southwick, S. M., Pietrzak, R. H.**, & **Heinz, A. J.** U.S. veterans who do and do not utilize VA healthcare services: Demographic, military, medical, and psychosocial characteristics.

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- 71. **Gutner, C. A.** The Unified Protocol for PTSD. In **J. Wachen** (Chair), *New frontiers in PTSD treatment.*
- 72. **Keane, T. M.** The future of PTSD treatment. In **T. M. Keane** (Chair), *The future of PTSD treatment.*

- Santiago, R., Meffert, B., Hausman, C., Sawicki, D. A., & Heinz, A. J. Anger, aggression, and impulsivity: A multimodal investigation among military veterans with alcohol use disorder and PTSD.
- Sawicki, D. A., Meffert, B., Hausman, C., Santiago, R., & Heinz, A. J. Distress tolerance, emotional awareness, hopefulness, and suicidality: An examination among military veterans with alcohol use disorder and PTSD.
- 70. **Wiltsey Stirman, S.** Personalizing treatment: Implications for clinical practice and implementation. In S. Dorsey (Chair), *Personalizing behavioral therapies for anxiety- and trauma-related disorders: Using baseline characteristics to prescribe treatments and personalize treatment content.*
- 73. **Krystal, J. H.** *Why ketamine, why now: And where do we go from here?*
- 74. **McLean, C. P.** New frontiers in PTSD treatment research. In J. **Wachen** (Chair), *New frontiers in PTSD treatment research.*

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75. Meyer, E. C., Walser, R. D., Hermann, B., DeBeer, B., La Bash, H., Batten, S., & Schnurr, P. P. Acceptance and Commitment Therapy for co-occurring posttraumatic stress disorder and alcohol use disorders in U.S. military veterans: Preliminary treatment outcomes. In J. Wachen (Chair), New frontiers in PTSD treatment.

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- 78. **Abdallah, C.** PTSD and depression symptom severities are differentially associated with hippocampal subfield volume loss in combat veterans.
- Akiki, T., Averill, C. L., Wrocklage, K. M., Schweinsburg, B., Scott, J. C., Martini, B., Averill, L., Southwick, S. M., Krystal, J. H., & Abdallah, C. Hippocampus and amygdala morphometric changes in PTSD.
- 80. Arditte Hall, K., Rosebrock, L. E., Pineles, S. L., Rando, A., & Liverant, G. I. State and trait emotion regulation in veterans with PTSD and depression. In K. Arditte Hall (Chair), *Elucidating the mechanisms of dysfunction in PTSD and depression*.
- 81. Arenson, M., **McCaslin, S. E.**, Neylan, T. C., & Cohen, B. *Predictors* of high-functioning in veterans with PTSD: Results from the Mind Your Heart Study.
- Averill, C. L., Satodiya, R., Scott, J. C., Wrocklage, K. M., Schweinsburg, B., Averill, L., Akiki, T., Amoroso, T., Southwick, S. M., Krystal, J. H., & Abdallah, C. PTSD and depression are differentially associated with hippocampal subfield volume.
- 83. Averill, L., Abdallah, C., Southwick, S. M., Krystal, J. H., Gelernter, J., & Pietrzak, R. H. Examining the effects of APOE genotype and PTSD on cognitive dysfunction in older veterans: Results from the National Health and Resilience in Veterans Study.
- Bernardy, N. C., & Sherrieb, K. Innovative strategies to improve access to evidence-based PTSD treatment for rural veterans. In N. C. Bernardy (Chair), Complicated prescribing practices in VA patients with PTSD: Approaches to observation and improvement.
- 85. **Canale, C., Grillo, A., Gutner, C. A., Street, A. E.,** & **Iverson, K. M.** Beyond posttraumatic stress disorder: Effects of military sexual trauma in women across behavioral health domains.
- 86. **Carlson, E. B.**, Palmieri, P. A., & Dekel, R. *What do mental health risks in primary care veterans tell us about mental health needs?*
- 87. **Carlson, E. B.**, Spain, D. A., Palmieri, P. A., Cordova, M., Stein, D. M., & Bruns, B. R. *What do traumatic injury survivors want? A survey of patient and family mental health needs and preferences.*
- Cohen, Z. D., Wiltsey Stirman, S., DeRubeis, R., Smith, B. N., & Resick, P. A. Improving outcomes through a new variable selection approach for treatment selection in sexual trauma PTSD. In Z. Cohen (Chair), *Precision medicine in trauma: Selecting* the optimal treatment for an individual with PTSD.
- 89. Creech, S. K., Benzer, J., Ebalu, T., Murphy, C. M., & **Taft, C. T.** National implementation of a trauma-informed intervention for intimate partner violence in the Department of Veterans Affairs: First year outcomes. In S. Creech (Chair), *New directions in assessing and treating intimate partner violence among women and men veterans in the Department of Veterans Affairs.*
- 90. **Davis, B., Haller, M.**, & **Norman, S. B.** The implementation of Prolonged Exposure in a substance use disorder treatment program.

- 76. **Rosen, C. S.**, & Sayer, N. A. Organizational factors that promote clinics' use of evidence-based treatments for PTSD.
- 77. Weinstein, E., Smidt, K., Litwack, S., Unger, W., & Niles, B. L. What is Present Centered Therapy (PCT)? A closer look at the common control group in posttraumatic stress disorder clinical trials.
- 91. **Eftekhari, A., Crowley, J. J., Mackintosh, M. A.**, & **Rosen, C. S.** Predicting treatment drop out from Prolonged Exposure therapy among veterans in VA training program using patient-level characteristics and symptom trajectories.
- 92. **Galovski, T. E.**, & Chappuis, C. Creative fidelity: Persevering in the administration of manualized protocols despite seemingly insurmountable odds. In **M. Beristianos** (Chair), *EBP implementation in complex treatment systems and settings: Training, access, processes, and outcomes.*
- 93. **Gradus, J. L.**, Farkas, D. K., Svensson, E., Lash, T. L., & Sørensen, H. T. *The longitudinal sequelae of subsyndromal stress disorders in the population of Denmark.*
- Green, J. D., Lee, D. J., Rosen, R. C., Keane, T. M., & Marx, B. P. Longitudinal prediction of non-suicidal self-injury among Operation Enduring Freedom and Operation Iraqi Freedom veterans.
- 95. Greenbaum, M. A., Neylan, T. C., & **Rosen, C. S.** Prescribing practices for PTSD-related insomnia in two cohorts of U.S. veterans. In **N. C. Bernardy** (Chair), *Complicated prescription practices in VA patients with PTSD: Approaches to observation and improvement.*
- 96. **Grillo, A., Canale, C.,** & **Iverson, K. M.** Chronic mental and physical health sequelae of traumatic brain injury caused by intimate partner violence: A longitudinal investigation.
- 97. **Grillo, A., Iverson, K. M.**, & Dichter, M. E. Screening female patients for intimate partner violence in VHA: Evidence to inform modifications or de-implementation of secondary screening recommendations.
- 98. Gulliver, S. B., Kimbrel, N. A., Meyer, E. C., Morissette, S. B., Zimering, R., & Knight, J. A. Trying to spin gold from straw: What is state-of-the-art for assessment of PTSD and related disorders in firefighters? In B. B. DeBeer (Chair), Complexity in assessment: Objectivity in novel development and validation of measures in PTSD populations.
- 99. **Hamblen, J. L.**, Monahan, C., Barrie, K., Eastman, L., Barnett, E., & **Hoyt, J.** *Predictors of initiation and dropout from trauma focused cognitive-behavioral therapy in veterans with co-occurring PTSD and substance use disorders.*
- 100. Harik, J. M., Hamblen, J. L., Grubbs, K., & Schnurr, P. P. Treatment descriptions shape preferences for PTSD treatment.
- 101. **Iverson, K. M.** Network analysis of PTSD symptoms in a sample of female veterans with and without a history of intimate partner violence. In M. Suvak (Chair), *Network analysis of PTSD symptoms in a sample of female veterans with and without a history of intimate partner violence.*

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- 102. Kachadourian, L., Harpaz-Rotem, I., Southwick, S. M., & Pietrzak, R. H. Risk and resilience factors for suicidality among U.S. military veterans with histories of PTSD and major depressive disorder: Results from the National Health and Resilience in Veterans Study.
- 103. Keefe, J. J., Wiltsey Stirman, S., Cohen, Z. D., DeRubeis, R., Smith, B. N., & Resick, P. A. What works for whom in sexual trauma PTSD: Patient characteristics indicate which treatment they are most likely to complete. In Z. Cohen (Chair), Precision medicine in trauma: Selecting the optimal treatment for an individual with PTSD.
- 104. **Kehle-Forbes, S.**, Polusny, M. A., & Oslin, D. *Predictors of veteran* retention in sequential and integrated therapy for co-occurring PTSD and substance use disorders.
- Klein, A., Dutra, S., Bovin, M. J., Rosen, R. C., Keane, T. M., & Marx, B. P. The role of negative affect in PTSD symptom presentations.
- Knight, J. A., Belingeri, A., & Fox, A. Variability in unique PTSD symptom patterns compared across clinical and non-clinical samples: The myriad manifestations of PTSD.
- 107. **La Bash, H.**, DeBeer, B., & Castillo, D. Functional and quality of life outcomes with PTSD group treatment in Iraq and Afghanistan female veterans.
- La Bash, H., Meyer, E. C., Rossiter, J., Kimbrel, N. A., DeBeer, B., Gulliver, S. B., & Morissette, S. B. Gender differences in the associations among combat exposure and military sexual trauma with postdeployment PTSD symptoms in Iraq and Afghanistan War veterans.
- Lee, D. J., Bovin, M. J., Weathers, F. W., Palmieri, P. A., Schnurr, P. P., Sloan, D. M., & Marx, B. P. Measurement variance in the assessment of DSM-5 posttraumatic stress disorder.
- 110. Lee, D. J., Kearns, J. C., Wisco, B. E., Green, J. D., Gradus, J. L., Sloan, D. M., Nock, M. K., Rosen, R. C., Keane, T. M., & Marx, B. P. Independent and cumulative associations between risk factors and subsequent suicide attempts among Operation Enduring Freedom and Operation Iraqi Freedom veterans.
- 111. London, M. J., Rosen, C. S., Orazem, R. J., Smith, B. N., & Sayer, N. A. Mixed method case example of improvement in implementation of evidence-based psychotherapies (EBPs) for posttraumatic stress disorder.
- 112. Lunney, C. A., Cohen, Z. D., Wiltsey Stirman, S., Wiley, J., DeRubeis, R., & Schnurr, P. P. Predictors and moderators of symptom change in Prolonged Exposure and Present-Centered Therapy in female veterans with PTSD.
- Mackintosh, M. A., Greene, C. J., Willis, E. A., Grubbs, K., & Morland, L. A. Using technology to enhance and extend treatment of dysregulated anger among traumatized individuals.
- 114. **Maieritsch, K. P.**, Romero, E., Voss Horrell, S., Hessinger, J., & **Hamblen, J. L.** *Preparatory treatment activities, are they necessary?*
- 115. **Maniates, H., Wolf, E. J.**, Milberg, W., McGlinchey, R., & **Miller, M. W.** Gamma-glutamyl transferase predicts internalizing psychopathology in trauma-exposed OEF/OIF veterans.
- 116. McCaughey, V., Smith, B. N., Resick, P. A., Galovski, T. E., & Fuentes-Carpentier, M. Brain injury incurred during domestic violence against women: The influence on recovery from PTSD.

- 117. **Meffert, B.**, Lai, J., Tobin, C., **Cloitre, M.**, **Woodward, S. H.**, & **Heinz, A. J.** Interpersonal violence has unique associations with neurocognitive functioning: An examination among military veterans with alcohol use disorder and PTSD.
- 118. Meis, L., Spoont, M., Erbes, C., Noorbaloochi, S., Hagel Campbell, E., Eftekhari, A., Rosen, C. S., Tuerk, P., Kattar, K., & Polusny, M. Sticking it out in trauma-focused treatment: How family factors may reduce or increase treatment drop out. In L. Meis (Chair), *Embracing complexity: How PTSD can shape and be shaped by families.*
- 119. **Mitchell, K. S., Wolf, E. J.**, Lyons, M. J., Goldberg, R. W., & Magruder, K. M. *A co-twin control study of the association between PTSD, and obesity in male veterans.*
- 120. **Morabito, D. M., Ortigo, K. M.**, Jackson, L. C., **Crowley, J. J.**, Lindsay, J. A., & **Cloitre, M.** *WebSTAIR enterprise wide initiative: Implementation and quality improvement of web-based treatment for rural women veterans with military sexual trauma.*
- Morland, L. A., Mackintosh, M. A., Willis, E. A., Glassman, L. H., Sohn, M. J., & Greene, C. J. Impact of evidence-based PTSD treatments on anger symptom reductions.
- 122. Moshier, S. J., Gay, N. G., Wisco, B. E., Mitchell, K. S., Lee, D. J., Sloan, D. M., Weathers, F. W., Schnurr, P. P., Keane, T. M., & Marx, B. P. Applying network theory to DSM-5 PTSD: A comparison of clinician- and patient-rated data.
- 123. Niles, B. L., Smidt, K., Weinstein, E., & Fisher, L. M. Evidencebased psychotherapies for PTSD: How are they carried out in a real-world VA setting?
- 124. Norman, S. B., Haller, M., Hamblen, J. L., & Pietrzak, R. H. The burden of comorbid alcohol use disorder and PTSD in U.S. military veterans.
- 125. Pedersen, S., Kleiman, S., Klein, A., Green, J. D., Harwell, A. M., Rosen, R. C., Keane, T. M., & Marx, B. P. Associations between PTSD severity and risky driving behaviors in male and female OEF/ OIF veterans.
- 126. Portnoy, G. A., Haskell, S. G., **King, M. W., Maskin, R.**, Gerber, M. R., & **Iverson, K. M.** Accuracy and acceptability of a screening tool to detect intimate partner violence perpetration among women veterans: A pre-implementation evaluation.
- 127. **Rosen, C. S.**, Clothier, B., Noorbaloochi, S., **Smith, B. N.**, Orazem, R., & Sayer, N. Which veterans receive evidencebased psychotherapy for PTSD. In **M. Beristianos** (Chair), *EBP implementation in complex treatment systems and settings: Training, access, processes, and outcomes.*
- 128. Sanders, W., Smith, B. N., & Vogt, D. Mental health and quality of life predictors of VA family service use.
- 129. Schnurr, P. P. Discussant. In A. Wagner (Chair), *Pharmacologic* agents as treatment and adjunct to psychotherapy for PTSD: Data with MDMA, oxytocin and ketamine.
- 130. **Schnurr, P. P.** Discussant. In Z. Cohen (Chair), *Precision medicine in trauma: Selecting the optimal treatment for an individual with PTSD.*
- 131. Schnurr, P. P., & Lunney, C. A. Residual symptoms following Prolonged Exposure and Present-Centered Therapy for PTSD in female veterans and soldiers. In S. Larsen (Chair), *The aftermath* of PTSD treatment: Characteristics associated with either residual symptoms or long-term improvement.

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- 132. **Shiner, B.** Anticonvulsant medication use in veterans with posttraumatic stress disorder.
- 133. **Shiner, B.** Trends in opioid use disorder diagnoses and medication treatment among veterans with posttraumatic stress disorder. In **N. C. Bernardy** (Chair), *Complicated prescribing practices in VA patients with PTSD: Approaches to observation and improvement.*
- 134. Sippel, L. M., Eilbott, J., Fichtenholtz, H. M., Harpaz-Rotem, I., Mayes, L., Pelphrey, K., & Southwick, S. M. Oxytocin and vocal affect processing in PTSD: Preliminary findings and clinical implications. In A. Wagner (Chair), *Pharmacologic agents as* treatment and adjunct to psychotherapy for PTSD – Data with MDMA, oxytocin, and ketamine.
- 135. Sippel, L. M., Watkins, L. E., Pietrzak, R. H., Hoff, R., & Harpaz-Rotem, I. The unique roles of emotional numbing and arousal symptoms in relation to social connectedness among military veterans in residential treatment for PTSD.
- 136. **Spoont, M.**, Sayer, N., **Rosen, C. S.**, Nelson, D., Murdoch, M., & **Kehle-Forbes, S.** *Six months after a PTSD diagnosis Are veterans any better?*

- 137. Suvak, M. K., Zinoviev, D., **Gutner, C. A.**, & **Iverson, K. M.** Network analysis of PTSD symptoms in a sample of female veterans with and without a history of intimate partner violence. In H. Hogdon (Chair), *Applications of network analysis to the etiology and sequelae of traumatic stress.*
- 138. **Wachen, J.**, Mintz, J., LoSavio, S. T., Dondanville, K. A., Yarvis, J. S., Peterson, A. L., Resick, P. A., & the STRONG STAR Consortium. *Predictors of treatment engagement in Cognitive Processing Therapy for PTSD among active military.*
- 139. Wilcox, E., Stoop, T., Maniates, H., Miller, M. W., & Wolf, E. J. MMPI-2-RF predictors of DSM-5 PTSD severity and dissociative subtype features.
- 140. Wolf, E. J., Miller, M. W., Miller, D. R., Amstadter, A. B., Mitchell, K. S., Goldberg, J., & Magruder, K. M. Genetic and environmental influences on PTSD and resilience: A unified dimension of vulnerability to traumatic stress.
- 141. **Woodward, S. H.**, Jamison, A., Gala, S., Arsenault, N. J., Righi, S., & Lawlor, C. *Canine companionship is associated with attenuated responses to loud tones in PTSD.*
- 142. Zimmerman, L. E., Gutner, C. A., Healy, E., Feingold, Z., Bernard, C. L., Rosen, C. S., Wiltsey Stirman, S., & Chard, K. Using health system operations data to assess health care system complexity and improve the implementation of evidence-based psychotherapy.

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- 143. Abdallah, C., De Feyter, H. M., Averill, L., Jiang, L., Averill, C. L., Chowdhury, G., Purohit, P., de Graaf, R. A., Esterlis, I., Juchem, C., Pittman, B. P., Krystal, J. H., Rothman, D. L., Sanacora, G., & Mason, G. F. The effects of ketamine on prefrontal glutamate neurotransmission.
- Akiki, T., & Abdallah, C. Determining human brain modular architecture using subject-level functional multilayer networks.
- 145. **Duman, R.** Stress, depression and antidepressants: Remodeling synaptic connections.
- 146. Morrison, F. G., Maniates, H., Kwasnik, D., Logue, M. W., Wolf, E. J., Miller, M. W., & Huber, B. Dysregulated inflammatory related gene expression in the dorsolateral prefrontal of individuals with PTSD.
- 147. Sullivan, D. R., Marx, B. P., & Hayes, J. P. Behavioral and neural correlates of memory suppression in PTSD.
- 148. Wolf, E. J., Logue, M. W., Morrison, F. G., Stone, A., Schichman, S., McGlinchey, R., Milberg, W., & Miller, M. W. Posttraumatic psychopathology and a quickening pace of the epigenetic clock. In E. Wolf (Chair), Biological indices of stress-related accelerated aging and associated health outcomes.

Other

- 149. Abdallah, C. (2018, January). Surge in prefrontal connectivity underlies the rapid acting antidepressant effects of ketamine. In M. Kabbaj (Chair), *Ketamine and depression*. Winter Conference on Brain Research (WCBR), Whistler, Canada.
- 150. Abdallah, C., Dutta, A., Averill, C. L., McKie, S., & Averill, L. (2017, December). Ketamine, but not the NMDA receptor antagonist lanicemine, increases prefrontal connectivity in depressed patients. American College of Neuropsychopharmacology, Palm Springs, CA.
- 151. Adjognon, O., Grillo, A., Maskin, R., Gerber, H. R., Gutner, C. A., Dichter, M., Hamilton, A., Wiltsey Stirman, S., & Iverson, K. M. (2018, June). Getting intimate partner violence screening implementation right: Identifying best clinical practices, implementation strategies and contextual factors for success. Academy Health, Seattle, WA.
- 152. Akiki, T. (2018, February). *Network-restricted topology in neuroimaging: Exploring the default mode in PTSD*. Mood and Anxiety Program (MAP) Seminar at the Department of Psychiatry, Icahn School of Medicine at Mount Sinai, New York, NY.
- 153. Akiki, T., Averill, C. L., Wrocklage, K. M., Scott, J. C., Averill, C. L., Alexander-Bloch, A., Southwick, S. M., Krystal, J. H., & Abdallah, C. (2018, February). Intrinsic connectivity networks in posttraumatic stress disorder: A systematic graph theory approach. International Society for CNS Clinical Trials and Methodology, Washington, DC.
- 154. Averill, C. L., Averill, L., Wrocklage, K. M., Scott, J. C., Akiki, T., Schweinsburg, B., Southwick, S. M., Krystal, J. H., & Abdallah, C. (2018, June). Altered white matter diffusivity of the cingulum angular bundle in PTSD. International College of Neuropsychopharmacology, Vienna, Austria.

- 155. Averill, L., Averill, C. L., Akiki, T., Wrocklage, K. M., Scott, C., Schweinsburg, B., Southwick, S. M., Krystal, J. H., & Abdallah, C. (2018, June). Evidence of a suicidal ideation-specific neural signature of synaptic loss and dysconnectivity in PTSD. International College of Neuropsychopharmacology, Vienna, Austria.
- 156. **Azevedo, K. J.**, Lerner, B., Gale, R., Kim, B. O., Urech, T., Vashi, A., & Charns, M. (2018, June). *Implementing lean in a complex healthcare system: Lessons from the Lean Enterprise Transformation (LET) Pilot Sites*. Academy Health, Seattle, WA.
- 157. **Azevedo, K. J.**, Weiss, B., Webb, K., **Gimeno, J.**, & **Cloitre, M.** (2018, June). *Piloting STAIR delivered via telehealth for rural women veterans who have experienced sexual assault: Implications for reducing health disparities*. Academy Health, Seattle, WA.
- 158. Azevedo, K. J., Elspas, B., Dairagle, C., Olivia, E., Greene, C., Weitlauf, J., Asch, S., Hsieh, S., & Cronkite, R. (2018, June). *The Career Development Award Enhancements Initiative (CDAei): Working to increase diversity in VA's scientific workforce*. Academy Health, Seattle, WA.
- 159. Barnes, S. M., Sorenson, D., Smith, G., Borges, L. M., & Walser, R. D. (2018, July). Empowering patients to thrive despite their desire for death: A workshop on ACT for suicide. Association for Contextual Behavioral Science, Montreal, Québec.
- 160. Bogdan, K., Smith, B. N., Bair, M., Gerber, H. R., & Scioli, E. R. (2018, April). Self-efficacy for adoption and maintenance of exercise among fibromyalgia patients: A pilot study. American Academy of Pain Medicine, Vancouver, BC, Canada.
- 161. Corona, C. D., Wisco, B., Gamble, S., Pietrzak, R. H., & Van Orden, K. (2018, April). *Moral injury, substance abuse, and suicide ideation among veterans*. American Association of Suicidology, Washington, DC.
- 162. Creech, S. K., Benzer, J., Ebalu, T., Murphy, C., & **Taft, C. T.** (2017, December). *National implementation of a trauma-informed intervention to prevent and end intimate partner violence in the Department of Veterans Affairs: First year outcomes*. Science of Dissemination and Implementation in Health, Washington, DC.
- 163. Creech, S. K., Gnall, K., Murphy, C. M., & Taft, C. T. (2018, July). National implementation of a trauma-informed intervention for intimate partner violence in veterans: Two-year outcomes. In G. Portnoy (Chair), *Implementation of IPV screening and treatment in VHA: Successes, barriers, and next steps*. International Family Violence and Child Victimization Conference, Portsmouth, NH.
- 164. Davis, C., McLean, C. P., Rosen, C. S., Riggs, D., Cook, J., French, L., Wiltsey Stirman, S., Comtois, K., Dodanville, K., Borah, E., & Mistretta, M. (2018, May). Crosswalking implementation theory and practice: Applying the CFIR and ERIC frameworks to EBPs in the DoD. Health Services Research Conference, Menlo Park, CA.
- 165. Denneson, L., Hoffmire, C., Gradus, J. L., & Monteith, L. (2018, September). PTSD and suicide. In A. Street (Chair), PTSD and suicide. Women Veterans, Traumatic Stress and Post-Military Health: Building Partnerships for Innovation Summit, Washington DC.
- Duman, R. (2018, May). Stress, depression and antidepressants: Remodeling synaptic connections. The Gulf Coast Neuroscience Consortium, Houston, TX.

- 167. Etingen, B., **Harik, J. M.**, & Grubbs, K. (2018, August). Characterizing the reasons that individuals with posttraumatic stress disorder prefer certain evidence-based treatment options over others. Military Health System Research symposium, Kissimmee, FL.
- 168. Finley, E. P., Haro, E. K., Mader, M., Noel, P., Bollinger, M. J., Garcia, H., Bernardy, N. C., Rosen, C. S., & Pugh, M. J. (2018, June). Availability of guideline-recommended prescribing and psychotherapy for PTSD in community settings: Implications for access and quality. San Antonio Military Health System and Universities Research Forum, San Antonio, TX.
- 169. **Galovski, T. E.** (2018, April). *War and peace: Causes, consequences, and alternatives*. Research on Tap event at Boston University, Boston, MA.
- 170. **Galovski, T. E.** (2018, February). *Women and PTSD*. Mental Health Grand Rounds, Harvard Medical School, Boston, MA.
- 171. **Galovski, T. E.** (2018, June). *The psychological impact of military services on women veterans*. Association of State Women Veterans Coordinator, Alexandria, VA.
- 172. **Gnall, K.**, & **Taft, C. T.** (2018, July). *Intimate partner conflict, emotion, and health*. International Family Violence and Child Victimization Conference, Portsmouth, NH.
- 173. **Gnall, K.**, & **Taft, C. T.** (2018, July). *Participants' experiences* of completing the Strength at Home Intimate Partner Violence intervention. Family Violence and Child Victimization Conference, Portsmouth, NH.
- 174. **Gradus, J. L.** (2017, October). *Trauma and suicide in Denmark: Current understanding and future directions*. Columbia University Mailman School of Public Health, New York, NY.
- 175. **Gradus, J. L.** (2018, April). *Posttraumatic stress disorder and suicidal behavior: Current understanding and future directions.* American Foundation for Suicide Prevention, Concord, NH.
- 176. **Gradus**, J. L. (2018, January). *Trauma and suicide in Denmark: Current understanding and future directions*. Stanford University, Stanford, CA.
- 177. **Gradus, J. L.** (2018, January). *Trauma and suicide in Denmark: Current understanding and future directions*. Vermont Center on Behavior and Health, University of Vermont, Burlington, VT.
- 178. **Gutner, C. A.** (2018, September). *Psychosocial treatments for PTSD: Effectiveness and the impact of gender*. A Call to Arms: Advancing Women's Health Research in the Military, Boston, MA.
- 179. **Harpaz-Rotem, I.** (2018, June). *Can psychodynamic approach enhance Prolonged Exposure therapy for PTSD*? International Society of Psychotherapy Research, Amsterdam, Netherlands.
- 180. Harpaz-Rotem, I., Neria, Y., Olff, M., & Markowitz, J. (2018, June). Using ketamine to enhance the effect of exposure therapy for PTSD. In I. Harpaz-Rotem (Chair), PTSD treatment: Where do we go from here? A neurobiological markers approach to enhancing psychotherapy outcomes. Society of Psychotherapy Research, Amsterdam, Holland.
- 181. Hausman, C., Meffert, B., Morabilto, D. M., Sawicki, D. A., Regala, S. L., Southwick, S. M., Pietrzak, R. H., & Heinz, A. J. (2018, September). Protective factors related to suicide risk and purpose in life among female United States military veterans. European Symposium on Suicide & Suicidal Behaviour, Evergem, Belgium.

- 182. Hoffmire, C., Monteith, L., Park, C., Brenner, L., & Hoff, R. (2018, April). *Military discharge type and suicide ideation among OEF/OIF/OND veterans*. Annual Conference of the American Association of Suicidology, Washington, DC.
- 183. Iverson, K. M. (2017, December). Considering the influence of context, innovation complexity, and recipient characteristics in tailoring and applying facilitation strategies. Science of Dissemination and Implementation, Arlington, VA.
- 184. Iverson, K. M. (2017, December). IPV-related TBI among women veterans: Informing patient-centered interventions. NIH's Understanding TBI in Women Workshop. National Institutes of Health, Bethesda, MD.
- 185. Iverson, K. M. (2017, December). Screening female patients for intimate partner violence in the Veterans Health Administration: Evidence to inform modifications or de-implementation of secondary screening recommendations. Science of Dissemination and Implementation, Arlington, VA.
- 186. Iverson, K. M. (2018, July). Intimate partner violence screening programs in VHA women's health primary care: Informing scaleup and spread of best practices. In G. Portnoy (Chair), Addressing intimate partner violence in VHA. International Family Violence and Child Victimization Research Conference, Portsmouth, NH.
- 187. Jaworski, B. K., Owen, J. E., Kuhn, E. R., & Hoffman, J. E. (2018, June). Advancing research, practice, and innovation in VA mental health: An overview of the NCPTSD mobile mental health program. National Institutes of Health mHealth Technology Showcase, Bethesda, MD.
- 188. Jaworski, B. K., Taylor, K., & Owen, J. E. (2018, June). Building bridges: Using mHealth as a public mental health strategy. Conference of the Society for the Psychological Study of Social Issues, Pittsburg, PA.
- 189. Kachadourian, L., Ralevski, E., & Petrakis, I. (2018, June). Guilt and suicidal ideation in military veterans with alcohol dependence and PTSD: The mediating role of hostility. Research Society on Alcoholism, San Diego, CA.
- 190. **Keane, T. M.** (2017, October). *Recent advances in the psychological treatment of PTSD* [Webinar]. Mental Health Summit, Mental Health Academy Webinar.
- 191. **Krystal, J. H.** (2018, September). *Assessing brain drama today*. State of the Summit (SoSS), Silver Spring, MD.
- 192. **Krystal, J. H.** (2018, September). *Panel presentation for the council on research*. American Psychiatric Association, Washington, DC.
- 193. **Krystal, J. H.** (2018, September). *Panel presentation for the mental health council*. NIMH National Advisory Mental Health Council, Rockville, MD.
- 194. Levy, I. (2017, November). Attenuated threat reversal learning in combat veterans. Society for Neuroscience, Washington, DC.
- Levy, I. (2017, November). Medical decision making under uncertainty: Behavior and neural correlates. Society for Neuroscience, Washington, DC.
- 196. Levy, I. (2017, October). *fMRI investigation of uncertainty attitudes and PTSD symptom severity in combat veterans*. Society for Neuroeconomics, Toronto, Canada.

- Logue, M. W., Smith, A. K., Wolf, E. J., Maniates, H., Stone, A., Schichman, S. A., McGlinchey, R. E., Milberg, W., & Miller, M. W. (2017, October). Low correlation observed between DNA methylation in blood measured between a majority of CpG sites measured on both Illumina 450K and EPIC BeadChips. American Society of Human Genetics, Orlando, FL.
- 198. Martin, P. I., Ho, M., Krengel, M. H., Bogdanova, Y., Knight, J. A., Hamblin, M., & Naeser, M. A. (2017, November). Significant improvements in cognition, mood and fMRI scans in a retired, professional football player after intervention with photobiomodulation LED therapy to the brain: Case report. Boston University Chronic Traumatic Encephalopathy (CTE) Conference, Boston, MA.
- 199. **Meffert, B.**, Hausman, C., Santiago, R., Sawicki, D., Song, E., Lee, H. K., & **Heinz, A. J.** (2017, October). *Mobile cognitive and implicit bias training for military veterans with alcohol use disorder and cooccurring posttraumatic stress disorder*. Innovations in Psychiatry and Behavioral Health Conference, Stanford, CA.
- 200. Mitchell, K. S., & Iverson, K. M. (2018, April). Intimate partner violence and eating disorder symptoms in women veterans. Academy for Eating Disorders International Conference, Chicago, IL.
- 201. Mori, D., Smidt, K., Brown, L., Pless Kaiser, A., Weinstein, E., & Niles, B. L. (2018, May). Preliminary findings for a wellness program for veterans with symptoms of PTSD. International Congress on Integrative Medicine and Health Conference, Baltimore, MD.
- 202. Naeser, M. A., Martin, P. I., Ho, M., Bogdanova, Y., Krengel, M. H., Knight, J. A., Hamblin, M. R., & Koo, B. B. (2018, September). LED therapy improves functional connectivity and cognition in professional football player with TBI: Case study. American College of Rehabilitation Medicine, Dallas, TX.
- 203. Naeser, M. A., Martin, P. I., Ho, M., Krengel, M. H., Bogdanova, Y., Knight, J. A., Hamblin, M. R., & Koo, B. B. (2018, August). *Transcranial PBM to improve cognition in chronic TBI, and in a* 65-year-old retired, professional football player with possible CTE. North American Academy for Laser Therapy Conference, Detroit, MI.
- 204. Niles, B. L., Mori, D., Pless Kaiser, A., Smidt, K., Weinstein, E., & Wang, C. (2018, May). *Tai Chi and wellness for Gulf War illness: Protocol for a randomized trial*. International Congress on Integrative Medicine and Health Conference, Baltimore, MD.
- 205. Nillni, Y. I., & Rasmusson, A. M. (2018, August). Allopregnanolone: Potential PTSD-related mediator of negative pregnancy outcomes. Department of Obstetrics and Gynecology Grand Rounds, Boston Medical Center Boston, MA.
- 206. Nillni, Y. I., Finley, E., Copeland, L. A., & Vogt, D. (2018, April). The role of trauma, stress, and mental health on pregnancy outcomes among women veterans following separation from military service. In Y. Nillni (Chair), *The intersection of trauma, mental health, and perinatal health.* North American Society for Psychosocial Obstetrics and Gynecology Biennial Meeting, Philadelphia, PA.
- 207. Park, S., Mushiana, S., Zimmerman, L. E., Lounsbury, D., & Azevedo, K. J. (2018, May). Evidence-based mental health care: Qualitative 'systems thinking' codes and Consolidated Framework for Implementation Research (CFIR) domains. Health Services Research conference, Menlo Park, CA.

- 208. **Pietrzak, R. H.** (2018, April). *Posttraumatic growth among U.S. veterans over time*. Society of Behavioral Medicine, New Orleans, LA.
- 209. **Pless Kaiser, A.** (2018, April). *Trauma and aging: Assessment and treatment among older adults and veterans*. University of Massachusetts Boston Gerontology Department Faculty and Student Speaker Series, University of Massachusetts-Boston, Boston, MA.
- Pomernacki, A., Carney, D. V., Schnurr, P. P., Caudle, K. L., Zehm, L., Shih, M., Chen, T., Chow, B., Goldstein, K., Bastian, L., Chard, K., Ruzek, J. I., Huang, G., Johnson, M., Yano, E. M., & Frayne, S. M. (2018, January). *Design and implementation of the women's enhanced recruitment process (WERP) of the VA Women's Health Practice-Based Research Network (WH-PBRN)*. Society of General Internal Medicine (SGIM) California & Hawaii Regional Meeting, Stanford, CA.
- 211. **Rasmusson, A. M.** (2017, December). *Explorations in female military brain injury summit*. Pink Concussions Meeting, Tampa, FL.
- 212. **Rasmusson, A. M.** (2018, September). *Advances in our understanding of posttraumatic stress disorder and related health conditions in women*. North Dakota Annual Behavioral Health Conference, Fargo, ND.
- 213. **Rosen, C. S.** (2017, October). *Implementation science*. Panel discussion at the Cohen's Veterans Care Summit, Washington, DC.
- 214. Rosen, C. S., Riggs, D., Peterson, A., Young-McCaughan, S., Borah, E., Brim, W., Comtois, K., Cook, J., Davis, C., Dondanville, K., Finley, E., Hancock, A., Mackintosh, M. A., Neitzer, A., Ruzek, J. I., Wiltsey Stirman, S., & McLean, C. P. (2018, March). Targeted strategies to increase evidence-based psychotherapy (EBP) implementation in military settings. TBI Research Forum, Palo Alto, CA.
- 215. **Sanacora, G.** (2017, November). *Examining the role of glial cells* and glutamate neurotransmission in the pathophysiology and treatment of mood disorders. Center for Psychiatric Neuroscience, Jackson, MS.
- 216. **Sanacora, G.** (2017, October). *Building and advancing interventional psychiatry services*. National Association of Academic Psychiatry Program Administrators, New Haven, CT.
- 217. **Sanacora, G.** (2017, October). *Intravenous and intranasal rapid-acting antidepressants*. 16th Annual Psychopharmacology Update, Cincinnati, OH.
- 218. **Sanacora, G.** (2018, February). *Rational use and development of ketamine in the treatment of neuropsychiatric disorders*. Seminar, San Francisco, CA.
- 219. **Sanacora, G.** (2018, June). *Molecular and cellular mechanisms underlying the rapid-onset antidepressant actions of ketamine*. International College of Neuropsychopharmacology, Vienna, Austria.
- 220. **Sanacora, G.** (2018, June). *Rational use and development of ketamine in the treatment of neuropsychiatric disorders*. Designer drugs: A new look at some old (and not so old). Alexandria, VA.
- 221. **Sanacora, G.** (2018, March). *Rational use and development of ketamine in the treatment of neuropsychiatric disorders*. Ohio Psychiatric Association, Columbus, OH.

- 222. **Sanacora, G.** (2018, March). *Update on preclinical and translational neuroscience: A brief history of ketamine*. Ketamine and related treatments. Oxford, England.
- 223. **Sanacora, G.** (2018, May). Update on preclinical and translational neuroscience. American Psychiatric Association, New York, NY.
- 224. **Schnurr, P. P.** (2018, April). *Psychotherapy in the treatment of PTSD: The state of the evidence.* Kendon Smith Lecture Series, University of North Carolina, Greensboro, NC.
- 225. Schnurr, P. P. (2018, August). *Perspective on posttraumatic stress disorder in women veterans*. National Meeting on Active Duty and Women Veterans' Health, National Institutes of Health Office on Women's Health, Washington, DC.
- 226. Scioli, E. R., Bair, M., Hauger, R. L., Bogdan, K., & Rasmusson, A. M. (2018, April). Neuropeptide Y as a potential neurobiological mediator of exercise benefits for pain sensitivity in patients with chronic pain and PTSD. American Academy of Pain Medicine, Vancouver, BC, Canada.
- 227. Shiner, B., Leonard Westgate, C., Gui, J., Maguen, S., Young-Xu, Y., Schnurr, P. P., & Watts, B. V. (2018, August). A retrospective comparative effectiveness study of medications for posttraumatic stress disorder in routine practice. Military Health Research Consortium Annual Meeting, Kissimmee, FL.
- 228. **Shiner, B.**, Leonard Westgate, C., Gui, J., Maguen, S., Young-Xu, Y., **Schnurr, P. P.**, & Watts, B. V. (2018, July). *A retrospective comparative effectiveness study of medications for posttraumatic stress disorder in routine practice*. VA Health Services Research and Development Career Development Conference, Salt Lake City, UT.
- 229. Smith, B. N., Spiro, A., & Magruder, K. M. (2018, March). The impact of lifetime stress exposures and mental health sequelae on current health and functioning in Vietnam-era women veterans. American Psychosomatic Society, Louisville, KY.
- 230. **Street, A. E.** (2017, November). *Trauma exposure and PTSD among women veterans: Military women's experiences of combat and sexual trauma*. RAND Psychology Speaker Series, Washington, DC.
- 231. **Street, A. E.** (2018, August). *Complex trauma and associated symptom presentations*. National VA/DoD Women's Mental Health Residency: Building Clinical Expertise to Meet Women's Unique Treatment Needs, Arlington, VA.
- 232. **Street, A. E.** (2018, March). *Sexual assault and PTSD*. Posttraumatic Stress and Related Disorders: The Latest from Neurobiology to Treatment, McLean Hospital and Harvard Medical School, Boston, MA.
- 233. **Street, A. E.** (2018, September). *Trauma exposure and PTSD among women veterans*. A Call to Arms: Advancing Women's Health Research in the Military, Boston University School of Medicine, Boston, MA.
- 234. **Sullivan, D. R., Hayes, J. P.**, Lafleche, G., & Verfaellie, M. (2018, March). *Functional brain alterations associated with cognitive control in blast-related mild traumatic brain injury*. Cognitive Neuroscience Society, Boston, MA.
- 235. Tsai, J., & **Pietrzak, R. H.** (2018, February). *Growth following exposure to traumatic experiences: National studies of U.S. veterans*. World Psychiatric Association's Thematic Congress Innovation in Psychiatry, Melbourne, Australia.

Appendix F: Fiscal Year 2018 Scientific Presentations

- 236. **Vasterling, J. J.** (2018, August). *When psychological and neural trauma co-occur: PTSD and mild traumatic brain injury*. 13th Nordic Meeting in Neuropsychology, Stockholm, Sweden.
- 237. **Vasterling, J. J.** (2018, June). *Associations of PTSD, TBI, and neurocognitive performance over time* [Webinar]. VA HSR&D Cyberseminar.
- 238. **Vasterling, J. J.** (2018, March). *Mild TBI and co-morbid PTSD: When psychological and brain trauma co-occur*. Keynote Address. North American Brain Injury Society Annual Meeting, Houston, TX.
- 239. **Vasterling, J. J.**, & Brailey, K. (2018, August). *Psychological trauma: Clinical considerations for neuropsychologists*. Nordic Meeting in Neuropsychology, Stockholm, Sweden.
- 240. **Walser, R. D.**, Farnsworth, J., Borges, L. M., Evans, W., & **Drescher, K.** (2018, July). Thriving in the midst of moral pain: A presentation of pilot data supporting Acceptance and Commitment Therapy for Moral Injury (ACT-MI). In L. Borges (Chair), *A functional contextual approach to moral injury: Conceptualization, treatment, and implementation considerations.* Association for Contextual Behavioral Science Annual Meeting, Montreal, Quebec.
- 241. Zimmerman, L. E., Smita, D., Lounsbury, D., Rosen, C. S., Kimerling, R., Trafton, J., Bernard, C. L., Holbrook, A., & Lindley, S. (2017, October). Participatory system dynamics: Partnering with frontline managers and providers to achieve timely, highquality addiction services. Addiction Health Services Conference, Madison, WI.

Appendix G: Fiscal Year 2018 Educational Presentations

Department of Veterans Affairs

- Beaudreau, S., Pless Kaiser, A., & Moye, J. (2018, September). Late life PTSD experience, evaluation, and treatment [Webinar]. Geriatric Mental Health Research in VHA: Priorities and Strategies for Moving Forward Virtual Conference.
- 2. Carrillo, M. (2018, March). *The National Center for PTSD and PILOTS database* [Webinar]. Veterans Affairs Library Network.
- 3. **Galovski, T. E.** (2018, July). *Balancing clinical flexibility while preserving efficacy in delivering EBPs for PTSD* [Webinar]. Department of Veterans Affairs PTSD Consultation Program Cyberseminar Series.
- 4. **Iverson, K. M.**, & **Galovski, T. E.** (2018, June). *Head injury* and PTSD in veteran and civilian women who have experienced intimate partner violence [Webinar]. VA HSR&D Cyberseminar.
- 5. **Juhasz, K. M.** (2018, August). *Cards for Connection: Coping skills playing cards for veterans*. VHA Innovation: Experience Demo Day, Washington, DC.
- 6. Juhasz, K. M. (2018, May). Cards for Connection: A novel medium for reaching homeless veterans. Health Services Research Conference, Menlo Park, CA.
- Juhasz, K. M., McCaslin, S. E., Muller, N., Ontiveros, E., Owen, J. E., Russ, C., & Tevis, J. (2018, August). *Cards for Connection: Coping skills playing cards for veterans*. VHA Innovation: Experience Demo Day, Washington, DC.
- Juhasz, K. M., McCaslin, S. E., Muller, N., Ontiveros, E., Owen, J. E., Russ, C., & Tevis, J. (2018, September). *Cards for Connection: Coping skills playing cards*. VISN 1 Improvement + Innovation Summit, Marlborough, MA.
- 9. **Matteo, R.** (2018, August). *Posttraumatic stress disorder (PTSD): Overview and resources to support veterans, families, and providers*. Veterans Mental Health Summit, Tuscaloosa, AL.
- McCarthy, E. (2017, October). Understanding PTSD and National Center for PTSD resources [Webinar]. VA Employee Health and Wellness Program.
- 11. **McCarthy, E.** (2018, April). *Understanding PTSD: National Center for PTSD resources and Consultation Program* [Webinar]. Veteran Health Administration Vocational Rehabilitation and Employment and Veteran Integration to Academic Leadership Programs.
- 12. **McCarthy, E.** (2018, March). 2017 VA/DoD clinical practice guidelines for PTSD: Patient education resources [Webinar]. SCAN ECHO Pain Conference.

- McCarthy, E., Bernardy, N. C., York, A., Friedman, M. J., & Montano, M. A. (2018, May). Uncomfortably numb: Tackling chronic benzodiazepine use in PTSD care [Webinar]. SCAN ECHO 2018 Updates in PTSD Care: Case presentation and discussion.
- McCarthy, E., Boggs, A., Friedman, M. J., Bernardy, N. C., & Montano, M. A. (2018, March). Slow medicine in the age of stimulants: Navigating stimulant use in PTSD care [Webinar]. SCAN ECHO 2018 Updates in PTSD Care: Case presentation and discussion.
- McCarthy, E., Murphy, E., Friedman, M. J., Bernardy, N.
 C., & Montano, M. A. (2018, February). Dazed and confused: Navigating marijuana use in PTSD care [Webinar]. SCAN ECHO 2018 Updates in PTSD Care: Case presentation and discussion.
- 16. **McCarthy, E.**, Robeck, E., **Friedman, M. J.**, **Bernardy, N. C.**, & **Montano, M. A.** (2018, April). *The pain of war: Navigating the intersection of pain and PTSD care* [Webinar]. SCAN ECHO 2018 Updates in PTSD Care: Case presentation and discussion.
- 17. **McGee-Vincent, P.** (2018, April). *Developing a peer-led apps group for tech tools for Whole Health* [Webinar]. Virtual training delivered to primary care providers and peer support specialists in support of their VISN 1 Innovation Grant.
- 18. **McGee-Vincent, P.** (2018, July). *Mobile mental health apps in PTSD care* [Webinar].
- Ortigo, K. M. (2017, December). LGBT health care within VA medical centers: Moving towards a safe space for all Veterans [Webinar]. HIV/HCV VA Psychology Fellows, Washington, DC.
- Ortigo, K. M., & Cloitre, M. (2018, May). webSTAIR: Implementing trauma-informed web-based skills training with coaching support [Webinar]. VA Office of Rural Health Community Call Series, Washington, DC.
- 21. **Pineles, S. L.** (2018, September). *PTSD and women's mental health* [Webinar]. Department of Veterans Affairs PTSD Consultation Program Cyberseminar Series.
- 22. Shea, M. T., & **Schnurr, P. P.** (2017, December). *Present-Centered Therapy* [Webinar]. Department of Veterans Affairs PTSD Consultation Program Cyberseminar Series.
- 23. **Vogt, D.** (2018, March). *The Veterans Metrics Initiative Study: A novel approach to the study of veteran reintegration* [Webinar]. VA HSR&D Timely Topics Cyberseminar Series.
- 24. **Vogt, D.** (2018, May). *Impact of deployment-related risk and resilience factors on PTSD in military veterans*. VISN 20 Mental Illness Research, Education, and Clinical Center (MIRECC) Cyberseminar Series, Seattle, WA.

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- 25. Burder, J., Wahlberg, L., & **McCarthy**, **E.** Continuum of care the practice environment.
- 26. **McGee-Vincent, P.,** Pollack, S., & Romero, E. *Measurement Based Care: Moving beyond the initiative.*
- 27. **Kehle-Forbes, S.**, & **Hamblen, J. L.** Patient engagement and dropout issues: Perceptions and misperceptions about patient needs.
- 28. **Maieritsch, K. & Yoder, M**. What is specialty PTSD care? And who is being treated?
- 29. **Rosen, C. S.**, & Sayer, N. Organizational factors differentiating VHA PTSD outpatient teams with high and low delivery of evidence based psychotherapy.
- 30. Sayer, N., **Rosen, C., Spoont, M.** Results of PERSIST: Promoting effective, routine and sustained implementation of stress treatments.
- 31. Yamokoski, C., Allen, S., & **Maieritsch, K.** Program reach, access and patient flow: Front door and back door considerations.

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- Loflin, M. J., Babson, K. A., Sottile, J., Gruber, S., Norman, S. B., & Bonn-Miller, M. Cannabinoid preferences of veterans selfmedicating PTSD with cannabis.
- McCarthy, E., DeViva, J. C., Norman, S. B., Southwick, S. M., & Pietrzak, R. H. Sleep difficulties partially mediate the relation between PTSD symptoms and functioning in U.S. veterans: Results from the National Health and Resilience in Veterans Study.
- 34. **McCaslin, S. E.**, Farmer, C., & Kelly, K. Strengthening the services and resources available to veterans with posttraumatic stress and associated conditions: Understanding the landscape of care and the role of public-private partnerships.
- 35. **Norman, S. B., McKee, T. A.**, & **Hamblen, J. L.** What do providers treating veterans with PTSD want to know? A novel program to support implementation of evidence based treatments for veterans in community settings. In M. Charney (Chair), *Novel approaches to optimizing PTSD evidence-based therapy dissemination.*
- 36. Schnurr, P. P. Clinical practice guidelines: Are they still clinical?
- Smith, L. J., Vujanovic, A. A., Paulus, D. J., Gallagher, M. W., Norman, S. B., & Tran, J. K. Perceived stress and alcohol dependence in firefighters: The role of posttraumatic stress.
- 38. Watson, P., Walser, R. D., Juhasz, K. M., McCaslin, S. E., & Matteo, R. Online toolkits to support providers and responders working with traumatized individuals and communities.

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- 39. **Galovski, T. E.** Enhancing gold standard psychological treatment to better meet needs of women veterans.
- 40. Gillespie, R., Haskell, S., Gerber, M., **Smith, B.**, & **Schnurr, P. P.** (Chair). *The impact of PTSD on physical health in women veterans*.
- 41. Gleason, T., Lipson, L., Harrell, M., Haas, M., Kelly, K., Borja, S., & Schnurr, P. P. (Chair). Funders' perspectives on needs and strategic priorities.
- 42. **Gutner, C. A.**, Mc Hugh, R. K., **Mitchell, K. S.**, Chang, G., & Garovoy, N. D. *PTSD and substance use/ eating disorders in women veterans.*
- 43. Haskell, S., **Shipherd, J.,** Coxe, K., Ilem, J., & **Hamblen, J.** (Chair). Institutional strengths and challenges for addressing the needs of women veterans.
- 44. **Iverson, K.**, McGlinchy, R., Snedaker, K., Bruce, L., & **Arditte Hall**, **K.** (Chair). *Intimate partner violence and traumatic brain injury*.
- 45. Katon, D., Miller, L., Weitlauf, J., Patton, E., & **Nillni, Y.** (Chair). *PTSD and reproductive health.*
- Kaysen, D., Norman, S., Galovski, T., Cloitre, M., & Wachen, J. (Chair). Enhancing gold standard psychosocial treatments to better meet needs of women veterans.
- 47. McCutcheon, S., **Galovski, T.**, McGraw, K., & **Street, A.** (Chair). *Key priority areas for future services and research: The "State of the Union" in women veterans' health and key future directions.*

- Mitchell, K., Garovoy, N., Chang, G., McHugh, K., & Gutner, C. (Chair). PTSD and substance use/eating disorders in women veterans
- 49. **Pineles, S. L.,** Haas, M., Katz, E., Inslicht, S., & **Rasmusson, A. M.** *Biomarkers and related treatments.*
- 50. **Rasmusson, A.** Advances in our understanding of posttraumatic stress disorder and related health conditions in women.
- 51. Rasmusson, A., Katz, E., Haas, M., Inslicht, S., Pineles, S. PTSD and suicide.
- 52. Ross, P., Brice, T., Lewis, A., Fredriksson, S., & **Galovski, T.** (Chair). *Women veterans' perspectives*.
- 53. **Vogt, D.** Unique readjustment concerns for newly separated female veterans.
- 54. Vogt, D., DeVoe, E., Polusny, M., Bell, M., Kimerling, R., & Kehle-Forbes, S. (Chair). Gender differences in the impact of PTSD secondary to combat and MST on functional outcomes.
- 55. **Wolf, E.**, Spiro, R., Magruder, K., Altemus, M., & **Pless Kaiser, A.** (Chair). *PTSD and aging*.

Other

- 56. **Bernardy, N. C.** (2018, August). *Decreasing chronic* benzodiazepine use in Department of Veterans Affairs posttraumatic stress disorder (PTSD) care. American Legion National Convention, Minneapolis, MN.
- 57. **Galovski, T. E.** (2017, November). *Head injuries during assaults against women: Implications for recovery from PTSD* [Webinar]. Women Veterans with Epilepsy Workgroup.
- 58. **Galovski, T. E.** (2018, March). *Leadership and readiness: From boots to business*. U.S. Army Women's Foundation 10th Annual Summit, Washington, DC.
- 59. **Galovski, T. E.** (2018, September). *Moving the needle further toward recovery in the treatment of PTSD: Flexible approaches to care*. Women's Health Division at Brigham and Women's Hospital, Boston, MA.
- Greene, C. J., & Prins, A. (2017, November). Delivery of problem solving therapy in college counseling centers: Helping students move forward. Association of Behavioral and Cognitive Therapy, San Diego, CA.
- 61. **Keane, T. M.** (2018, March). *PTSD and related disorders*. Harvard Medical School, Boston, MA.
- 62. Kimble, C., **Chang, A.**, Marker, L., & **McCaslin, S. E.** (2018, August). *Community providers' perceptions of military culture training*. American Psychological Association, San Francisco, CA.
- 63. Marker, L., **Chang, A.**, Kimble, C., & **McCaslin, S. E.** (2018, August). *Examining the effectiveness of the VA Community Provider Toolkit*. American Psychological Association, San Francisco, CA.
- 64. **Matteo, R.** (2018, July). *PTSD awareness: Creating a supportive work environment* [Webinar]. The Nature Conservancy Veterans in Nature's Service (VINS) Employee Resource Group.
- 65. **McCarthy, E.** (2017, October). *Supporting providers treating veterans and service members with PTSD*. U.S. Army National Guard 883rd Combat Stress Control Unit, MA.
- 66. **McCaslin, S. E.** (2018, March). Organizational policies and culture. In S. Graham (Chair), *Creating protective environments*. Mayor's Challenge to Prevent Suicide Among Service Members, Veterans, and their Families, Washington, D.C.
- McCaslin, S. E., Huitink, Z., Humphries-Wadsworth, T., & Elder, J. (2018, May). Videos, tools, and resources for workplace action. Employers Answering the Call: Helping to prevent suicide among service members, veterans, and their families, Arlington, VA.
- 68. **McGee-Vincent, P.** (2018, May). *PHQ-9 overview* [Webinar]. Measurement-Based Care Initiative.
- 69. **McGee-Vincent, P.**, & Lynch, K. (2018, January). *Mobile apps for long-term care* [Webinar]. Psychologists in Long-Term Care Series.
- 70. **McGee-Vincent, P., Jaworski, B. K.**, & **Owen, J. E.** (2018, August). *Hands-on skills for using mobile apps and online programs for veterans with PTSD and related issues*. American Psychological Association, San Francisco, CA.
- 71. **Miller, K. E.** (2018, March). *Exposure, relaxation, and rescripting therapy* [Webinar]. Cognitive-behavioral sleep medicine case conference at Stanford School of Medicine's University Sleep Medicine Center.

- 72. **Miller, K. E.**, & **Jamison, A. L.** (2017, November). *Sleep disturbances among trauma-exposed military and veteran populations* [Webinar]. APA Society for Military Psychology.
- 73. Moye, J., **Cook, J.**, & **Pless Kaiser, A.** (2018, March). *PTSD in late life* [Webinar]. Meeting the Mental Health Needs of Aging Veterans: Research and Practice webinar series. Boston, MA.
- 74. **Ortigo, K. M.** (2017, November). *Serving LGBTQ veterans: Moving towards a safe space for all veterans* [Webinar]. Cohen Veterans Network National Mental Health Seminar.
- 75. **Sanacora, G.** (2017, November). *Rational development and use of ketamine and other potentially rapid acting antidepressants*. Weill Cornell Grand Rounds, New York, NY.
- 76. **Sanacora, G.** (2018, September). *Rational development and clinical adoption of ketamine and other rapid acting pharmacological treatments in psychiatry*. Peter Miller Musser Grand Rounds Lecture in Depression, Boston, MA.
- 77. Schnurr, P. P. (2017, October). *PTSD Treatment Decision Aid: The choice is yours*. Warrior Wellness Alliance, Boston, MA.
- 78. **Schnurr, P. P.** (2018, March). *Psychotherapy in the treatment of PTSD: The state of the evidence.* Harvard-McLean conference on Posttraumatic Stress and Related Disorders: The Latest from Neurobiology to Treatment, Boston, MA.
- 79. Schnurr, P. P., Riggs, D., & Devlin, C. (2017, December). 2017 VA/DoD clinical practice guideline for the management of posttraumatic stress disorder and acute stress disorder: A revised framework to assess and treat patients [Webinar]. Defense Health Agency Psychological Health Cyberseminar Series.
- Sippel, L. M. (2018, February). Posttraumatic stress disorder: Risk and recovery in social contexts. Grand Rounds, Department of Psychiatry, Geisel School of Medicine at Dartmouth, Lebanon, NH.
- 81. **Sippel, L. M.** (2018, February). *Posttraumatic stress disorder: Risk and recovery in social contexts*. Keene State College Psi Chi, Keene, NH.
- 82. **Street, A. E.** (2018, April). *Day of awareness for sexual assault and trauma*. Roundtable discussion hosted by Boston University School of Medicine's STOP (Sexual Trauma Outreach and Prevention), Boston, MA.
- 83. **Street, A. E.** (2018, March). *Women Veterans Network (WoVeN): Building a community of women veterans* [Webinar]. Invited address for the Center for Women Veterans Tri-Administration Women Veterans Program Quarterly Training Call.
- 84. Street, A. E., & Raja, S. (2018, May). Trauma-informed care: Empowering warriors to promote recovery [Webinar]. Invited address for the Uniformed Services University's Center for Deployment Psychology Webinar Series: Forces for health: A conversation about recovery and multidisciplinary care.
- 85. **Taft, C. T.** (2018, March). *Domestic violence and child abuse in the military*. Invited address for the Senate Armed Services Subcommittee on Personnel, Washington, DC.
- 86. **Taft, C. T.**, & Creech, S. K. (2018, March). *Strength at Home Couples program*. Air Force Family Advocacy Program social workers, San Antonio, TX.
- 87. **Vogt, D.** (2017, November). Measuring well-being in the Veterans Metrics Initiative. *Exploring the components of wellness and their relationship to a successful military to civilian transition roundtable*. Wounded Warrior Project, Washington, DC.

- 88. **Vogt, D.** (2017, October). *Change in veterans' well-being during the first year after military separation*. Henry Jackson Foundation, Bethesda, MD.
- 89. **Vogt, D.** (2018, April). *Gender similarities and differences in veterans' well-being throughout military-to-civilian transition*. Henry Jackson Foundation, Bethesda, MD.
- Vogt, D. (2018, April). Unique challenges for female veterans during the transition from military service to civilian life. Cyberseminar for Military Women's Health Research Interest Group, Tri-Service Nursing Research Program, Uniformed Services University.
- 91. **Vogt, D.** (2018, January). *Application of the Well-Being Inventory framework for the Transition Assistance Program*. Inter-agency TAP Senior Steering Group, Online.
- 92. **Vogt, D.** (2018, July). *The Well-Being Inventory (WBI): A validated approach to assess veterans' well-being after they separate from military service* Health and Well-Being Task Force, Stand to II Meeting. U.S. Chamber of Commerce, Washington, DC.
- 93. **Vogt, D.** (2018, June). *The Well-Being Inventory and The Veteran Metrics Initiative (TVMI) Study*. British Ministry of Defense, London, England.

- 94. **Vogt, D.** (2018, June). *The Well-Being Inventory*. Expert Reference Group, Outcome Measurement Framework Project, Anglia Ruskin University, Chelmsford, England.
- 95. **Vogt, D.** (2018, June). U.S. veterans' well-being after separating from military service: Findings from the Veterans Metrics Initiative (*TVMI*) Study. British Armed Forces Covenant Team, London, England.
- 96. **Vogt, D.** (2018, May). *Gender differences and similarities in the well-being of U.S. veterans following transition from military service*. Centre for International and Defense Policy, Queen's University, and Canadian Institute for Military and Veteran Health Research's 2nd Annual Gender Dimension of Veteran Transition Workshop, Kingston, Ontario, Canada.
- 97. **Vogt, D.** (2018, September). *Research on veterans' post-military well-being: Trends, findings, and implications*. Warrior Community Integration Symposium, America's Warrior Partnership, Atlanta, G.

Appendix H: Fiscal Year 2018 Editorial Board Activities

Administration and Policy in Mental Health Services and Mental Health Services Research Wiltsey Stirman

American Journal of Medical Genetics, Part B Gelernter

Asian Biomedicine (Research Reviews and News) Gelernter

The Behavior Therapist Wiltsey Stirman (Associate Editor)

Behavior Therapy Gutner; Sloan (Editor); Wiltsey Stirman

Behaviour Research and Therapy Sloan

Biological Psychiatry Duman; Gelernter; Krystal (Editor); Sanacora

Biological Psychiatry: Cognitive Neuroscience and Imaging Sanacora

Brain Stimulation Duman

Chinese Journal of Psychology Keane

Chronic Stress Abdallah (Editor); Duman; Esterlis; Krystal (Associate Editor); Pietrzak; Rasmusson; Sanacora; Southwick; Woodward

Clinical Psychology Review Pineles (Editorial Board, Guest Editor)

Clinical Psychology: Science and Practice Keane; Wiltsey Stirman (Guest Editor) **Cognitive and Behavioral Practice** McLean

Community Mental Health Journal Harpaz-Rotem

Current Psychiatry Reports Friedman

Data in Brief (Elsevier) Akiki

Depression and Anxiety Holtzheimer, Schnurr

Eating Behaviors Mitchell (Associate Editor)

European Journal of Psychotraumatology Cloitre (Associate Editor)

Frontiers in Neuroscience: Neurogenesis Duman (Associate Editor)

International Journal of Emergency Mental Health Keane

Journal of Abnormal Psychology Miller (Associate Editor); Wolf

Journal of Anxiety Disorders Pietrzak

Journal of Child and Family Studies Tiet

Journal of Clinical Psychology Sloan

Journal of Consulting and Clinical Psychology Marx; Sloan; Taft Journal of Contemporary Psychotherapy Sloan

Journal of Depression and Anxiety Tiet

Journal of Family Psychology Taft

Journal of Family Violence Taft

Journal of Neurochemistry Duman

Journal of Neuroscience Levy (Associate Editor)

Journal of Trauma and Dissociation Barlow; Carlson; Cook; Marx

Journal of Traumatic Stress Galovski (Associate Editor); Miller; Morland; Wolf

Molecular Neuropsychiatry Abdallah

Molecular Pharmacology Duman Neuropsychopharmacology

Duman; Gelernter (Associate Editor)

Psychiatric Genetics Gelernter

Psychological Assessment Vasterling

Psychology Injury and Law Pietrzak

Psychological Services Norman

orman

Psychological Trauma: Theory, Research, Practice and Policy

Barlow; Carlson; Cook; Keane; Marx; Miller; Smith; Vogt; Wachen

Psychopharmacology

Abdallah; Duman

Psychosomatic Medicine

Sloan



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VA Boston Healthcare System (116B-2) 150 South Huntington Avenue Boston, MA 02130

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