



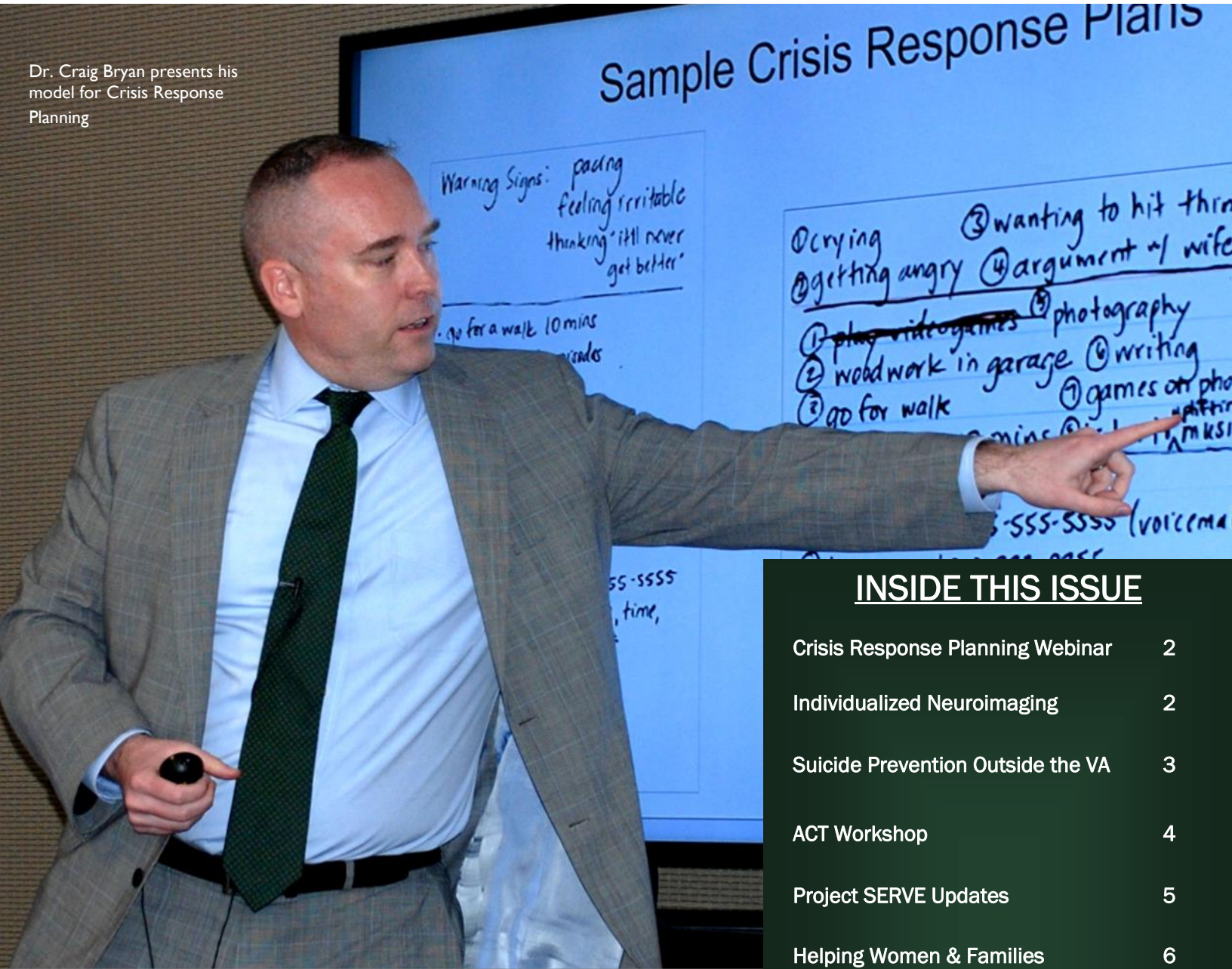
# Points of Excellence

The Newsletter of the VISN 17 Center of Excellence for Research on Returning War Veterans

**SPRING 2018**

**Vol. 4, Issue 1**

Dr. Craig Bryan presents his model for Crisis Response Planning



## INSIDE THIS ISSUE

Crisis Response Planning Webinar	2
Individualized Neuroimaging	2
Suicide Prevention Outside the VA	3
ACT Workshop	4
Project SERVE Updates	5
Helping Women & Families	6
In Memoriam	7
Gulf War Illness Study	7
Recent Articles	8

The VA VISN 17 Center of Excellence for Research on Returning War Veterans is dedicated to conducting research that serves to improve the quality of life of our nations Veterans and foster the wellbeing of their families.

Editor: Richard Seim, PhD

Co-Editor: Laura Zambrano-Vazquez, PhD

Photography: Lisa Boynton, Richard Seim

Content Authors: Lisa Boynton, Steven Nelson, Kathryn Roe, Richard Seim, Mollie Shin, Laura Zambrano-Vazquez

## Craig Bryan Webinar



In February, the Center of Excellence was proud to welcome Dr. Craig Bryan to present his research to a national audience via our webinar series. Dr. Bryan is a nationally-recognized expert on suicide prevention, a Veteran of the Iraq War, and the current Executive Director of the National Center for Veterans Studies at the University of Utah. He provided an overview of an empirically-based crisis response plan, which outlines simple steps for a suicidal individual to follow when in a crisis. Results from a recently completed randomized clinical trial show that such crisis response planning reduces suicide

attempts by 75% as compared to the contract for safety.

Dr. Bryan also discussed the primary motives for suicidal behavior, identified the core components of an effective crisis response plan, and provided examples and education on how to help a suicidal patient identify and implement strategies that can reduce their suicide risk. The webinar was attended by over 240 VA providers from around the nation, as well as mental health practitioners from the greater Waco area.

---

## Cover Article in *Neuron*

The cutting-edge work from our Neuroimaging Core investigators, **Dr. Evan Gordon** and **Steven Nelson**, has been featured on the front cover of *Neuron*, one of the most influential journals in the field of neuroscience. In their article titled "Precision Functional Mapping of Individual Human Brains," Dr. Gordon and colleagues present data on the promising use of longer scanning times to collect more precise images of individual brains. The article addresses how neuroimaging research has focused its attention on group-average data, and the limitations on the kinds of results that can be derived from groups when using functional magnetic resonance imaging (fMRI) data.

Since the brain's functional-anatomic organization shows considerable variability across individuals, group averaging can misrepresent brain anatomy, making it difficult to interpret at the individual level. Therefore, fMRI has largely failed in providing data that can meaningfully inform diagnostics, prognostics, or treatment recommendations for individuals with





## Cover Article in *Neuron* cont'd

neurological or neuropsychiatric disorders. To address the limitations of the group-averaging approach, Dr. Gordon and colleagues used a multimodal MRI dataset optimized for individual-focused analysis including structural MRI, task-related fMRI, and resting fMRI. Although data was collected from only ten participants, each had a plethora of neuroimaging and neuropsychological data to maximize precision of measurements. The study confirmed that brain organization is highly variable across individuals and is qualitatively different relative to estimates from group averaging. Furthermore, results demonstrated that reliable individualized measures of brain function and organization, which could result in high clinical utility, can be achieved with copious amounts of data. Dr. Gordon and Dr. Nelson have taken these findings and implemented this high-data individualized-neuroimaging approach to understand TBI and PTSD comorbidity in Veterans. To read more about this interesting research go to:



Dr. Evan Gordon

[www.cell.com/neuron/abstract/S0896-6273\(17\)30613-X](http://www.cell.com/neuron/abstract/S0896-6273(17)30613-X)

---

## Suicide Prevention Initiative

**Dr. Justin Benzer**, the Implementation Science Core leader, and **Dr. Bryann DeBeer**, a Behavioral Science Core investigator, recently received \$800K from the VA National Center for Patient Safety for their Patient Safety Center of Inquiry—VA Suicide Prevention Collaborative (PSCI-VASPC) proposal. Focusing on a much-needed area of attention in Veteran suicide prevention, this promising project will work on developing, implementing, and evaluating practical solutions to reduce suicide among Veterans who are not currently enrolled in VA healthcare. Although suicide prevention has been identified as a top priority by the VA Secretary, there are several emergent challenges in the field that Drs. Benzer and DeBeer will address through this project. For instance, until recently, VA suicide prevention efforts had centered exclusively on preventing Veteran suicide *within* the VA. Despite the fact that these efforts have resulted in substantial reductions in suicide rates among Veterans utilizing VA services, suicide rates among Veterans not enrolled in VA care remain at almost 4x the rate of their fellow Veterans receiving VA care.

When Veterans do not receive their medical or mental health care through the VA, they also fail to benefit from the VA's suicide prevention practices. With their project, Drs. Benzer and DeBeer hope to improve suicide prevention for Veterans receiving non-VA care in the Central Texas area by targeting three initial objectives: (1) developing a collaborative organizational structure between the VA and community suicide prevention services, (2) sharing suicide prevention best practices with the community to increase access for all Veterans, and (3) developing a new program of effective, low-cost suicide prevention services for Veterans using the best practices for suicide prevention in VA and the community.

## Welcome Our New Staff



**Lisa Corcoran, M.A.** is a psychology technician working on Project SERVE under the Behavioral Science Core where she performs diagnostic interviews of participants. Prior to joining the CoE, she worked for

American Institutes for Research in Washington, DC where she met her husband, a Veteran of the U.S. Marine Corps. Consistent with her work and interests at the CoE, Ms. Corcoran hopes to gain research experience and further her education in psychology by pursuing a Ph.D.



**Celeste Sanders, Ph.D.** is a psychology technician for the REGIONS and MINER studies in the Behavioral Science Core with Dena Davidson. After graduating from the University of Texas-Arlington, she joined the

American Heart Association as an Associate Guideline Advisor. Dr. Sanders's family has a rich military history which further drives her passion for her work at the CoE and makes her work with Veterans tremendously meaningful.



**Mollie Shin, B.S.** is a psychology technician working in the Behavioral Science Core on the SHE Study with Suzannah Creech. She began her time with the CoE in August 2016 as a

member of the VA-CERP undergraduate program and later graduated from Baylor University with a Psychology degree. In her free time, Ms. Shin volunteers with the Family Abuse Center in Waco.

## Graduation Address



**Dr. Yvette Szabo**, one of our postdoctoral fellows, was the recipient of the Guy Stevenson Award for Excellence in Graduate Studies at the University of Louisville, a recognition for the university's most outstanding doctoral graduate. Dr. Szabo had the special honor of delivering the student keynote address at her graduation ceremony and carrying the school's banner at the university-wide commencement ceremony.

## ACT Workshop

In January, **Dr. Eric Meyer**, a CoE investigator in the Behavioral Sciences Core, led a three-day training workshop for Central Texas Veterans Health Care clinicians on Acceptance and Commitment Therapy (ACT). With over twenty attendees, the training was a success and will continue with six months of follow-up consultation for attendees.

Dr. Meyer is a regional trainer for the national VA roll-out of ACT for depression.

## Project SERVE Updates

Over the past eight years, Project SERVE has gathered longitudinal data from hundreds of OIF/OEF/OND Veterans and its findings are informing our nation's understanding of the re-integration process and ways to improve treatment for them. The high engagement of the Veteran community is exemplified by our retention rates of 88% at 8-month follow-up, 86% at 16-month follow-up, and 84% in our 2-year follow-up interviews. We greatly appreciate the support of our Veteran participants who donate their time for this research.



## WHO WE STUDY

**700** TOTAL UNIQUE PARTICIPANTS

UP TO **7** YEARS OF FOLLOW-UP DATA

**45%** DIAGNOSED WITH PTSD, DEPRESSION, OR ALCOHOL USE DISORDER

**38** AVERAGE AGE

### BRANCH OF SERVICE

7% AIR FORCE  
5% MARINE CORPS  
3% NAVY  
8% NATL GUARD



**40%** EXPERIENCED A MILD TRAUMATIC BRAIN INJURY (TBI)

**70% MEN**

**30% WOMEN**

## FINDINGS

**36** TOTAL PAPERS PUBLISHED

**70** NATIONAL & INTERNATIONAL CONFERENCE PRESENTATIONS

**Modifiable risk factors for PTSD, depression and related problems with functioning (e.g., social, occupational) • Mindfulness • TBI • Neuropsychological factors • Substance Use Disorders • Military sexual trauma • Predictors of suicide risk • Chronic pain • Genetic risk factors • Toxic exposures • Interaction of mental and physical health • Self-compassion • Moral injury**

The Winner of the \$100 SERVE Raffle is Participant 205432. Congratulations!

## Helping Women and Families

The study “Safety and Health Experiences (SHE): Addressing the Health Concerns of VA Women with Sexual Trauma” aims to develop and test a brief computer-based intervention that addresses co-occurring health concerns for women Veterans with a history of lifetime sexual trauma. This study, led by **Dr. Suzannah Creech**, a CoE investigator in the Behavioral Science Core, began in the Fall of 2016. The brief intervention targets the women’s co-occurring health risks of alcohol misuse, interpersonal violence, and posttraumatic stress disorder. The beginning phase of the study, is an open trial of the program’s acceptability and feasibility. Enrollment in the study requires three different appointments: a baseline, a two-month follow up, and a four-month follow up. The open trial phase of the study has recently concluded with a 95% completion rate for the intervention group and a 90% retention rate at the four-month follow up. Women reported high satisfaction with both the intervention and the computerized software. The research staff is actively recruiting at the women’s primary care clinic at the Temple VA hospital for the next phase of the study.



Dr. Suzannah Creech

Dr. Creech is also leading a new study, “Strength at Home- Parents Pilot,” which will look at the effectiveness of group therapy for improving parent and child relationships. The pilot will be open to both men and women Veterans who are parents to young children ranging in ages from three to twelve. Past research has shown that many Veterans with a diagnosis of PTSD have difficulties communicating effectively with their children. This study will help determine if a VA national program would be effective for Veteran families hoping to improve their relationships. The recruitment phase is scheduled to start in the fall of 2018.

## Kudos

- **Bryann DeBeer** and **Dena Davidson** received funding from the U.S. Army to study Gulf War Illness
- An article by **Suzannah Creech** and **Justin Benzer** on mobile apps for PTSD treatment was featured in Clinician’s Trauma Update of the National Center for PTSD
- **Rakesh Guleria** and the MBG Study appeared as a feature story on KCEN-TV
- **Eric Meyer** gave an invited presentation on moral injury to the Center for Evolution & Medicine at Arizona State University
- **Steven Nelson** received a faculty appointment at Texas A&M College of Medicine

Find Us on  
Facebook



For updates on the Center of Excellence, please be sure to FOLLOW, LIKE, and SHARE our Facebook page:

[www.facebook.com/  
WacoCenterofExcellence](http://www.facebook.com/WacoCenterofExcellence)



## In Memoriam



Late last year, the CoE was saddened by the loss of our dear friend, Robert “Popeye” Carter. After returning from war in the early 1990s and struggling with numerous medical issues, Popeye dedicated his life to helping other Veterans return home, physically, mentally, and spiritually. In addition to serving on our Veterans Advisory Council, he also volunteered his time in service to the American Legion, the Heart of Texas Veterans One Stop, the McLennan County Veterans Association, the VFW, and the Waco Veterans Day Parade. Popeye was well known and respected by our local Veterans, his church, and the greater community of Waco, Texas. He will be dearly missed.

---

## REGIONS Study

Although short in duration, the first Persian Gulf War (1990-1991) has had severe long-lasting consequences for 25% of the 700,000 U.S. Veterans who served in this war. Gulf War Illness (GWI) is a chronic, debilitating illness with a complex of symptoms that include widespread pain, persistent headache, memory and concentration problems, gastrointestinal difficulties, sleep disturbances, and unexplained fatigue. Several different plausible causes for this disorder have been proposed including chemical weapons, biological weapons, pesticides and/or infectious diseases, with exposure to chemical weapons such as toxic nerve gases (e.g., sarin and cyclosporine mixes) receiving most support to date. Despite considerable research, twenty-seven years since the war have passed with effective treatments remaining elusive.

Because the symptom profile is similar to fibromyalgia, another chronic multi-symptom condition, some VA physicians are attempting to treat Gulf War Illness with FDA approved medications for fibromyalgia. In spite of the promise of this approach, the efficacy of these medications for alleviating some of the symptoms of Gulf War Illness has not been tested in a systematic way through randomized controlled trials. **Dr. Dena Davidson**, our Deputy Director of Research, and her team are seeking to address this gap in the field. Funded by the Office of Research Development’s Clinical Science Research and Development, Dr. Davidson’s study “Research Examining Gulf War Illness in our Nations Service members (REGIONS)” investigates treatments for Gulf War Illness through a randomized clinical trial. Through REGIONS, Veterans who meet criteria for Gulf War Illness and whose symptom profile include widespread pain and fatigue are treated for 18 weeks with one of two medications approved for the treatment of fibromyalgia. REGIONS is an ongoing study and will continue collecting data through the end of next year.



## Recent CoE Publications

Here is a sample of some of the recent articles published by our researchers:

Creech, S. K., Macdonald, A. M., Benzer, J. K., Poole, G., Murphy, C. M., & Taft, C. T. (2017). PTSD Symptoms Predict Outcome in Trauma-Informed Treatment of Intimate Partner Aggression. *Journal of Consulting and Clinical Psychology, 85* (10), 966-974. doi: 10.1037/ccp0000228

Kelly, M., DeBeer, B. B., Meyer, E. C., Kimbrel, N. A., Gulliver, S. B., & Morissette, S. B. (in press). Experiential avoidance as a mediator of the association between posttraumatic stress disorder symptoms and social support: A longitudinal analysis. *Psychological Trauma: Theory, Research, Practice, and Policy*.

Gordon, E., Scheibel, R. S., Zambrano-Vazquez, L., Jia-Richards, M., Meyer, E. C., May, G. J., & Nelson, S. M. (in press). High-fidelity measures of whole-brain functional connectivity and white matter integrity mediate relationships between TBI and PTSD symptoms. *Journal of Neurotrauma*.

Meyer, E. C., Frankfurt, S. B., Kimbrel, N. A., DeBeer, B. B., Gulliver, S. B., & Morissette, S. B. (in press). The Influence of Mindfulness, Self-Compassion, Psychological Flexibility, and Posttraumatic Stress Disorder on Disability and Quality of Life Over Time in War Veterans. *Journal of Clinical Psychology*.

Sorocco, K., Mignogna, J., Kauth, M., Hundt, N., Stanley, M., Thakur, E., Ratcliff, C. G., & Cully, J. A. (in press). Online CBT Training for Providers in Primary Care. *Journal of Mental Health Training, Education and Practice*.

**VISN 17**

## Center of Excellence for Research on Returning War Veterans

Doris Miller Dept. of Veterans Affairs Medical Center  
4800 Memorial Drive (151C)  
Waco, TX 76711

Visit us at online at  
[www.mirecc.va.gov/visn17/](http://www.mirecc.va.gov/visn17/)

