

# Points of Excellence

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

#### **WINTER 2017**

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Dr. Geoffrey May administers transcranial magnetic stimulation (TMS) treatment

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.

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#### **TMS Clinic Opening**



In November, the Center of Excellence opened its outpatient transcranial magnetic stimulation (TMS) clinic operated by our psychiatrist, Dr. Geoffrey May. TMS is a revolutionary new FDA-approved treatment for depression that uses electromagnetic induction to stimulate specific areas of the brain. The Waco clinic is one of only two VA locations providing TMS in the state of Texas. "We are excited to be able to offer this unique treatment option to Central Texas Veterans," said May.

TMS offers a viable alternative for patients whose symptoms have not fully remitted with other treatments or patients who wish to avoid the numerous side effects typically associated

with antidepressant medications. Dr. May administers treatment in the form of approximately 30 halfhour sessions and uses well-validated methods to assess for symptom improvement. Treatments are

painless and do not require any recovery time. The clinic is open to Veterans in the Central Texas area who are eligible for VA health care and have been previously treated for depression.

Currently, TMS is FDA approved to treat depression only, but researchers at the Center of Excellence are working to find out if this approach could be used to treat other mental health disorders including PTSD. To find out more about the clinic or neuroimaging research at the Center of Excellence, contact Dr. May at 254-338-5435.



#### **Our New Implementation Science Core**

The field of Implementation Science investigates how different strategies can be used to adopt and integrate evidence-based interventions into clinical and community settings with the goal of improving patient outcomes. Clinical researchers are continuously searching for ways to improve the efficacy and



effectiveness of treatments as well as develop novel interventions to address health concerns, yet these evidence-based practices can take over 10 years to be integrated into clinical settings and, when they are, their impact is often small at best. Research suggests that between 30-40% of patients do not receive care consistent with latest empirical evidence.

"Improved treatments are being developed but they are not being put to practice; this is where implementation science comes in" says Dr. Justin Benzer, Chief of the Implementation Science core. By investigating things such as how, when, where, and by whom care is delivered and managed, implementation science can serve as a bridge between science and practice. The mission of this Core is to improve the delivery of mental health care in Central Texas and nationally based on information gathered from patients, clinicians, administrators, and national databases of clinical outcomes. Though this team is still new, they already have two grant-funded projects underway.



Dr. Joseph Mignogna is leading the Effective Psychotherapy in Integrated Care (EPIC) project with the goal of identifying primary care mental health system design and psychotherapy provider decision-making processes that underlie the effective delivery of brief psychotherapy. "We will interview primary care providers and directors from sites successfully delivering brief psychotherapy to learn the things that contribute to their success" says Dr. Mignogna, "Then we can use our findings to develop and test a multicomponent implementation strategy to improve the delivery of brief psychotherapy in primary care settings."

In addition to the EPIC project, the Implementation Science core is also currently analyzing data collected at the Boston VA to understand the integration of care for chronic conditions in primary care clinics. They have also partnered with Texas A&M University in a project that will measure heart rate variability during diverse mental and physical tasks, including exposure treatment, to determine ways that these measures can improve current clinical care.



Dr. Joseph Mignogna Core Investigator

The promising Implementation Core is comprised of Dr. Justin Benzer (Core Chief), Dr. Joseph Mignogna (Investigator), Dawn Pierson (Psychology Technician), Andrea MacCarthy (Data Analyst), and Victoria Malone (Undergraduate Intern). Dr. Benzer is an Army Veteran who received a Ph.D. in Industrial and Organizational Psychology from Texas A&M University. Dr. Mignogna completed his Ph.D. in clinical psychology from Oklahoma State University and a postdoctoral fellowship at the Houston VA, where he first discovered his interests in implementation research. The core's passion for implementation science is evident in their productive start. Dr. Mignogna says they are "excited to take a part of facilitating the integration of treatments that we know work into the community."

#### Welcome Our New Staff



Justin Benzer, Ph.D. is the Chief of the Implementation Science Core. His research focuses on the integration and implementation of new evidence based practices into primary care and mental health settings. Prior

to arriving to the CoE, Dr. Benzer worked at the Boston VA on a grant focused on the integration of care for chronic conditions in a primary care setting.



Laura Constable, M.S. is a Project Coordinator for the REGIONS and MINER studies in the Behavioral Science Core where she is involved with recruiting, scheduling, and

screening participants. In her free time, Ms. Constable volunteers at the Susan G. Komen Foundation and the Salvation Army food pantry. She felt a calling to work with Veterans because of all the sacrifices they make for our country.



Rakeshwar Guleria, Ph.D. is an Investigator in our growing Biomarkers Core. He has a joint appointment with the Texas A&M Health Sciences Center where he is an assistant professor who trains students, fellows and

residents. He has a Master's degree in Microbiology and a Ph.D. in Biochemistry. Dr. Guleria is interested in dysregulations in the autonomic nervous system and their implications on the health of Veterans with PTSD and TBI.



Kathryn Roe, B.S. is a Psychology Technician working on the SHE Study and the Strength at Home rollout in the Behavioral Science Core. She served 14 years in the U.S. Navy, including two

deployments as Navy Meteorologist and Oceanographer. Ms. Roe recently joined the CoE to focus on bettering the lives of our Nation's Veterans.



Arsenio Scott, B.S. is a Psychology Technician working in the Neuroimaging Core on the TEMI study. Before completing his degree at George Mason University in Fairfax, Virginia, he served in the U.S. Navy. Mr.

Scott did one tour, affectionately referred to as the "West Pac," aboard the USS Dewey as an Operations Specialist and Link Operator where his primary role was confirming Friendly vs Foe aircraft.



Samantha Synett, LMSW is a Research Therapist working on Project Remission, a collaboration with the Behavioral Science Core and the STRONG STAR Consortium. Prior to joining the CoE, she worked at MD

Anderson Cancer Center as a social worker providing inpatient counseling and resource connection to stem-cell transplant recipients.

#### **WINTER 2017**

#### Meet Our New Postdoctoral Fellows



**Dr. Adam McGuire** says that whether it is through therapy or conducting research he is driven to find ways to help others "live a better, more meaningful life." As such, his research is focused on how to integrate positive prosocial emotions, such as moral elevation and gratitude, into existing treatments for PTSD and thus enhance the effectiveness of these treatments for our Veterans. Dr. McGuire completed an internship at the Mississippi Consortium and received a Ph.D. in clinical psychology from Seattle Pacific University. As part of his fellowship training, he hopes to explore how moral elevation is experienced in Veterans and how it can be best utilized to

further alleviate PTSD symptoms and moral injury distress. Currently, Dr. McGuire is working on developing a pilot study to test the emotional, cognitive, and physiological responses of moral elevation among a population of Veterans with PTSD.



**Dr. Carey Pulverman** received her Ph.D. in Clinical Psychology from the University of Texas at Austin after completing an internship at the South Texas VA. Since early in her education she was interested in participating in education and prevention efforts surrounding sexual violence. Her research investigates the impact of sexual trauma on women's health with a particular focus on developing novel interventions to help those whom have suffered sexual trauma. Her fellowship at the CoE is providing the opportunity for Dr. Pulverman to look at sexual trauma in a Veteran population. Under

the mentorship of Dr. Creech, she is currently working on several different projects including investigating the rates and types of sexual dysfunction most common among Veteran women with the goal of identifying best practices for treating these issues within the VA.



**Dr. Yvette Szabo** was drawn to psychology to understand the variability in people's behavior, and particularly in identifying "factors that can promote recovery after trauma, on both an individual level and at a wider scale." After completing an internship at the Houston VA, Dr. Szabo received her Ph.D. in Clinical Psychology from the University of Louisville. Her research focuses on biological and psychological factors that influence the development of poor health following exposure to stress and trauma, which can be targeted to facilitate recovery. Thus, currently her fellowship research is promoting additional collaboration between our Biomarkers

and Genetics Core and our Behavioral Sciences Core. Under the mentorship of Dr. Steven Nelson, she hopes that the fellowship will further prepare her for a clinical research career within the VA where she can continue to serve our Veterans.

Each year, the CoE welcomes postdoctoral researchers to our program to advance their careers as scientists who strive to help our Veterans and their families. If you or a colleague is interested in applying to our OAA-funded training program, please contact Dr. Richard Seim at richard.seim@va.gov

#### **Project SERVE Updates**

Over the past several years, Project SERVE gathered data from hundreds of individuals, connected or re-connected Veterans with potentially life-saving mental health services, presented findings at numerous conferences, and built partnerships across the VA and in the broader community. To better serve its participants, Project SERVE has modernized their data collection by using iPads and online questionnaires, and their team is now working hard on the next phase



of its longitudinal study: Project SERVE FX3, which is expected to require less time commitment than prior phases.

Over the past months, SERVE has teamed up with Project MAVEREX to provide a comprehensive look at Veteran's overall health using Magnetic Resonance Imaging (MRI). So far, 25 SERVE participants have also volunteered to be in Project MAVEREX. Additionally, they are starting to process the blood samples SERVE participants have provided at the Center of Excellence's new state-of-the-art lab. The biomarkers piece of SERVE gives a more holistic and accurate conceptualization that will ultimately guide more individualized and effective treatments.

Dr. Eric Meyer, the principal investigator of this project says, "We could not do this work without your continued support and feedback. We appreciate the time and effort involved in participating. My team and I, as well as our network of collaborators around the country strive to make the best use of the information you provide."



The Winners of the \$100 SERVE Raffle are Participants 205207 and 204095. Congratulations!

## Question for the SERVE Team

"I think I'm overdue on my questionnaire packet or interview. Am I still in the study?"

Absolutely! We understand that life happens. Our main goal is to study Veterans over time through the upsand-downs of life, hence why it is important that we collect data even if it's a little late. Please let us know how we can better accommodate your schedule at

, (254) 297-5175!

#### **WINTER 2017**

#### 2017-2018 Undergraduate Research Interns

This fall, the Center of Excellence welcomed fifteen new stellar undergraduates who were competitively selected from Baylor University and Tarleton State University as part of the VA Center of Excellence Research Program (VA-CERP). Additionally, six students who completed the program last year are continuing as second year interns to continue serving in diverse CoE research projects.

As part of this program, students are assigned to different CoE investigators and will be assisting on several facets of their research. During this year, students will also learn about the process of to medical/ applying graduate school, as well as write a complete literature review and create а research poster.



Dr. Laura Zambrano-Vazquez, Dr. Richard Seim, and the 2017-2018 Class of VA-CERP

#### Kudos

- Dr. Suzannah Creech was granted funding for a VA RR&D Merit Award titled "Adaptation, Refinement, and Open Trial of Parent Training for Veterans with PTSD."
- **Dr. Sheila Frankfurt** has been awarded a Career Development Award (CDA-1) to fund her research on moral injury in Veterans.
- Dr. Carey Pulverman received a SC MIRECC Clinical Educator Grant for her project titled "Coping with Sexual Difficulties after Military Sexual Trauma (MST)."
- Dr. Michael Russell has completed the Leadership VA (LVA) program. LVA has been nationally recognized for its ability to produce high-performing leaders who are ready to take on the challenges and issues facing VA.
- Drs. Richard W. Seim and Laura Zambrano-Vazquez were also awarded a SC MIRECC Clinical Educator Grant to fund the creation of an educational program.

### PE Training Workshop

September, the CoE In sponsored a three-day workshop training for researchers and clinicians to learn Prolonged Exposure (PE) therapy from Dr. Diane Castillo. Dr. Castillo is the Chief of our **Behavioral** Science Core and one of under 20 Master Trainers of PE in the VA system.



### **Project Remission Launches in Waco**

The Center of Excellence is proud to be collaborating with Dr. Alan Peterson, Dr. Edna Foa, and the STRONG STAR consortium on a therapy study known as Project Remission, which hopes to reduce PTSD symptoms for both active military and Veterans who have deployed post-9/11. The specific treatment offered through Project Remission is Prolonged Exposure Therapy (PE), a gold-standard intervention for PTSD developed by Dr.



The Project Remission team of collaborators from the CoE and STRONG STAR

Foa. The study will investigate two different intensive outpatient schedules for the treatment: daily delivery of PE for three weeks (a.k.a. "massed PE") and massed PE combined with additional therapeutic support to help process the exposure sessions.

Dr. Bryann DeBeer will be supervising the study at the CoE, one of only three sites chosen to conduct the study.study coordination at the Waco site. "I am very excited to lead this study and help make our EBPs more effective and more amenable to our Veterans" Dr. DeBeer says. Active recruitment has begun and is anticipated to last through September of 2018.

## VISN 17 Center of Excellence for Research on Returning War Veterans

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