Director’s Update

VA Medical Centers have a long history of being located and working very closely with their academic affiliates (medical schools and universities).

And many researchers employed at the VA, such as at our MIRECC, have “joint” or “dual” faculty appointments. Dual appointments allow the VA and the academic affiliate to grow their research at a faster pace, with more resources, and with access to more experts, than they could have done without this relationship. This means the health of our nation's Veterans ultimately benefits greatly from these dual appointments.

It also means that all of our nation's patients benefit through advancements in healthcare treatment, teaching, training, and education. Many advancements in US healthcare first came from research on addressing Veterans' healthcare needs, including,

- how to identify and treat PTSD
- first studies in the effects of smoking on lung cancer,
- invented the first pacemaker,
- pioneered the CAT scan concept,
- first successful liver transplant,
- developed modern treatment for hypertension,
- developed the nicotine patch,
- demonstrated the 1-aspirin-a-day treatment for reducing heart attacks,
- advancements in rehabilitative efforts like prosthetics, robotics and other adaptive technologies

In fact the very first official VA hospital was jointly established in Palo Alto by Dr. Ray Lyman Wilbur, a physician and then president of Standford University. Once the VA began its research program in the late 1920’s after World War I, and then especially after World War II, it became clear that locating VA hospitals and research programs near medical schools and universities would lead to strong training opportunities and shared knowledge to enhance and improve medical care for Veterans.


continued on next page
Our MIRECC has researchers from the Durham, Salisbury, Richmond, and Hampton VA Medical Centers who have dual appointments and/or collaborative relationships with Duke University, UNC-Chapel Hill, Virginia Commonwealth University, Wake Forest School of Medicine, Edward Via College of Osteopathic Medicine, Hampton University and Old Dominion University. These relationships have led to many advancements in healthcare by MIRECC researchers with dual appointments. This includes:

- Treatment for combined PTSD and smoking
- Mobile technology advances in smoking treatment
- Suicide prevention
- Development of new investigative drugs for pain, PTSD, Gulf War Illness and others
- Advances in the genetics of PTSD and suicide
- Developing advanced techniques in training providers to identify mild traumatic brain injuries.
- Developing mobile technology to understand substance use effects on spinal cord injuries.
- Creating new training opportunities in rural mental health and rehabilitation, addiction, quality improvement, optimizing health services, brain imaging, and other training opportunities.
- Increasing our understanding of women’s mental health and substance use disorders.
- Improving outcomes following psychiatric hospitalization through telehealth applications.
- Improved understanding of the differences in behavioral outcomes between traumatic brain injuries that happened during deployment compared to those that happened outside of deployment.
- Developing tools to better capture lifetime history of traumatic brain injuries as well as experiences of blasts or explosions.
- Advances in understanding the effects on brain structure and function of blast exposure and traumatic brain injuries

John A. Fairbank, Ph.D.
Director, Mid-Atlantic (VISN 6) MIRECC

Invited Lectures

Drs. Jean Beckham (MIRECC Co-Associate Director, Research and Director, Genetics Lab) & Nathan Kimbrel (MIRECC Co-Assistant Director, Clinical and Assistant Director, Genetics Lab) presented “Preventing Suicide in Veterans” to Senator Burr’s staff on February 19 in response to their request for information about Duke-VA partnered research and programs on suicide prevention and intervention.

In the News!

Congratulations to our VISN 6 MIRECC partners, Drs. Robin Hurley and Courtney Slough-Goodman (Salisbury site) and Drs. Jim Bjork and Shivan Desai (Richmond site) for being featured in the VA Insider as collaborators in the VA-wide Precision Medicine in Mental Health Care (PRIME Care) study.

Path to Better Sleep (also see pg 4), the self-directed, online version of CBT-i that is one of the VA's Veteran Training resources, was recently featured in the VA Insider!

Visit our web site for more resources

The Post-Deployment Mental Health (PDMH) study and repository: A multisite study of US Afghanistan and Iraq era veterans


PathtoBetterSleep(alsoseep4),theself-directed,onlineversionofCBTi-thatisoneoftheVA'sVeteranTrainingresources,wasrecentlyfeaturedintheVAInsider!
Focus on the VISN

**Expanding Community Partnerships**

**Together With Veterans (TWV) Program**

North Carolina’s Carteret County was selected as one of four sites for piloting the Together With Veterans (TWV) program. This Rural Veteran Suicide Prevention program was developed by the Rocky Mountain MIRECC. The Western Interstate Commission on Higher Education (WICHE) Mental Health Program is currently working with the local community to launch the program. The Durham VA Medical Center (Greenville VA HCC/Morehead City CBOC) has been engaged and is supportive of all stakeholders. These include MIRECC, WICHE and local stakeholders at the county level, public health, behavioral health and Veteran organizations. The objective is to reduce Veteran suicide rates. A key strategy is creating a unified coalition to meet this need at the ground level. To date two partnerships are being forged. One is to assess the community’s strengths, resources and needs regarding Veteran supports and service. The other is to implement strategies to enhance the Veteran serving system.

There are 5 key components of Together With Veterans (TWV):

1. Engage Veteran Community
2. Assess Community Capacity to Serve Veterans
3. Develop Community Action Plan
4. Support Implementation of the Action Plan
5. Program Evaluation

A SWOT (Strengths, Weaknesses, Opportunities, Threats) analysis and Community Readiness Survey were both completed. All community organizations involved in TWV participated in SAVE (suicide prevention) training. This was part of our action plan to increase knowledge of suicide risk and response to veterans experiencing suicidal thoughts. This training was provided by the Greenville VA HCC. The instructor was VA Suicide Prevention Coordinator, Laura McCarthy.

WICHE held a TWV Summit February 19 and 20 in Boulder, CO. A team of veteran, non-veteran, and VA stakeholders attended. During the Summit team members networked with other sites in Colorado and Montana. Information was gathered to help with next steps. These include identifying board members, contacting community supporters and/or organizations, preparing resource guides for the community, and advertisement.

An average of 20 Veteran deaths a day by suicide is the reason we have gathered and the hope to bring that number down to zero is the mission. Stay tuned to more news from the Together with Veterans Initiative in eastern North Carolina.

**Expanding Community Partnerships**

**North Carolina Governor’s Working Group Committee on Suicide Prevention**

On February 20th, the MIRECC participated in the inaugural meeting of this new group, which brought together people from VHA (MIRECC, VISN, SPCs, chaplains), NC Department of Health and Human Services, and the community. Community and private organizations included RTI, Veteran’s Bridge Home, and Mecklenburg County Veterans Services. The first part of the meeting provided an opportunity to network and learn about the work that various groups are doing around the state. The second half included brainstorming and discussion. Topics included defining the group’s priorities, potential strategies and perspectives, and identifying additional stakeholders to include in future discussions.

We look forward to continuing to be a part of this group. Participating aligns with our Center’s mission and will help inform our understanding of existing research to practice gaps in meeting the needs of Veterans and their families. More broadly, it also provides an opportunity to promote available VA programs and services. For example: Coaching into Care, the Suicide Risk Management Consultation Program, the PTSD Consultation Program, and Community Mental Health Summits.

**Expanding Community Partnerships**

**Improving Health and Reintegration of Veterans with Service-Connected Disabilities**

In February, UNC Charlotte hosted its 6th annual Veterans’ Health Conference. Summer Anderson (MIRECC Durham site) attended to learn about regional training opportunities for community providers related to post-deployment mental health. The meeting also served as an opportunity to learn about non-VA services and programs, available to Veterans and their families. The sessions that focused on Veterans’ lived experiences—including one Veteran-caregiver duo—were especially engaging. One of the final sessions of the day consisted of a “call to action” panel discussion. Overall, panelists commented on feeling encouraged by all of the great working going on in their communities. At the same time, they highlighted areas for improvement and a desire to do more to support Veterans and their families.

**New Personnel**

Greta (Melissa) Evans joined the MIRECC (Salisbury Site) in February to become Research Support for the Translational Clinical Neurosciences Collaborative.
The CBT-I program trains providers to treat Veterans who struggle with sleeplessness. CBT-I treats sleep-related thoughts and behaviors. The thought-related part of the treatment changes unhelpful sleep-related ideas. The behavioral part of the treatment includes two pieces that help the quality and quantity of sleep: Sleep Restriction Therapy and Stimulus Control Therapy. CBT-I is helpful for many patients with sleeplessness, including those with pain, cancer, mild traumatic brain injury, depression, and traumatic stress.

Stressful life events may add to the risk for sleeplessness. In most cases sleep problems last a short amount of time and go away when the stress goes away. Sometimes patients become too focused on their sleep problem, which can keep the sleep problem going. This is because it creates worry about sleep that leads to poor sleep habits that worsen sleep. Poor sleep habits include behaviors such as calling off plans because of being too tired, or worrying the activity will keep the person from sleeping. Changing bed times or wake times, spending extra time in bed, and some practices, such as extra-long napping, can worsen sleep problems. These factors are also part of CBT-I treatment.

Veterans in CBT-I treatment usually participate in six appointments lasting about an hour each. The provider works to match the treatment to the Veteran’s needs. Patients fill out a daily Sleep Diary and follow treatment guidelines between appointments. Session one is spent taking an in-depth look at the patient’s sleep problems. This intake session includes measures that help with treatment planning, track progress during treatment, and provide information for program evaluation.

Goals of the CBT-I program include:
1. Teaching the theoretical and applied components of CBT-I,
2. Addressing changes to CBT-I for Veteran-specific issues and clinic settings, and
3. Giving ongoing assistance for providers who use CBT-I, to increase CBT-I skill and use.

The program consists of educational training followed by expert consultation. CBT-I also includes a 5-week practice component before providers begin seeing patients. The educational part of training occurs through a 5-part TMS course or ten hours of live training. During the early training phase, focus is also placed on patient recruitment and problem-solving local challenges to implementation.

Following successful completion of the educational and practice phase, training consultants begin the 4-month consultation phase. This consists of weekly 90-minute telephone based group meetings with an expert training consultant and three other training participants. Training participants are expected to prepare for and actively engage in these weekly consultation meetings to grow their ability to treat patients with insomnia. During this 4-month period, participants audio record treatment sessions for review and competency rating by their consultant. The goal of the rating process is to provide feedback to the training participant regarding skill development, support local implementation efforts, and to increase skilled delivery of CBT-I. When finished with training, participants are added to the CBT-I provider list and receive a Record of Completion for their work. Particularly skilled training participants, who have experience providing supervision and/or peer consultation, may apply to become a future VA CBT-I training consultant.

For more information about CBT-I please see the CBT-I SharePoint site https://vaww.portal.va.gov/sites/OMHS/cbt_insomnia/default.aspx

For information about CBT-I training opportunities, please contact Dr. Jennifer Runnals at CBTIstaff@va.gov
Martindale, SL (Chair & Speaker)  

**Poster Symposium**  
**Blast Exposure: Cognitive, Biological and Behavioral Effects Beyond TBI**

**Summary:** Military service often results in exposure to a multitude of different blast forces throughout training, deployment, and combat. Effects of blast on the brain have been only recently studied, and exposure may occur with or without acute symptoms indicative of a TBI. It is important to understand the potential sequelae of such exposures and the circumstances that lead to negative outcomes beyond TBI history. This symposium will first present a new interview method for evaluating lifetime blast exposure. Using the interview to identify presence and severity of blast exposure, results will be presented describing the effect of exposure on functional brain networks, neuropsychological outcomes, development of PTSD, and recovery from PTSD. A strength of these presentations is the comprehensive nature of evaluations from a cross-sectional study investigating biological and behavioral effects of blast exposure. Participants (N = 280) completed diagnostic interviews, questionnaires, and cognitive testing. Eligible participants (n = 164) completed neuroimaging, including magnetoencephalography and magnetic resonance imaging. The predominant theme of results across presentations is that, as severity of blast exposure increases, the likelihood of negative outcomes also increases. These presentations demonstrate that blast exposure can affect individuals across a variety of outcomes, from altering brain function to confounding patterns of recovery from PTSD, with associations often emerging only at higher severity of exposure. Blast exposure remained related to outcomes beyond the effects of these other variables. This demonstrates the robustness of the relationship and the importance of considering blast exposure history, beyond the effects of TBI history, in evaluations of physical and mental health of post-deployment veterans. Discussant will synthesize data presented and confer similarities and differences as blast relates to TBI literature.

**Shura RD. The Salisbury Blast Exposure Interview.**  
**Rowland JA. The Effect of Blast Exposure on Functional Brain Networks**  
**Martindale SL. The Effect of Blast Exposure on Cognition beyond PTSD and TBI.**  
**Miskey HM. Blast Exposure as a Risk Factor for PTSD.**  
**Epstein EE. Blast Exposure and PTSD Recovery.**

Drs. Rowland, Martindale, Shura, Miskey & Epstein ready to present their symposium

& catching up with MIRECC Salisbury site folks who have gone on to new positions
**Publications**

**Virtual Education Materials**

Bateman JR, Pelak VS. *The Mental Status Examination.* [Neuro-ophthalmology Virtual Educational Library: NOVEL Web Site]. 2018. PDF available at: https://collections.lib.utah.edu/ark:/87278/s64b7716

Bettcher BM, Bateman JR, Pelak VS. *Neuropsychological Assessment.* [Neuro-ophthalmology Virtual Educational Library: NOVEL Web Site]. 2018. PDF available at: https://collections.lib.utah.edu/ark:/87278/s6fv2t70

Pelak VS, Bateman JR, Bettcher BM. *The Clinical Examination of Higher Order Visual Function: Syndrome-based Approach.* [Neuro-ophthalmology Virtual Educational Library: NOVEL Web Site]. 2018. PDF Available at: https://collections.lib.utah.edu/ark:/87278/s6zs73rw

**Book Chapters**


**Journal Articles**


**Objectives:** To investigate effects of cognitive rehabilitation with mobile technology and social support on veterans with traumatic brain injury (TBI) and posttraumatic stress disorder (PTSD).  
**Participants:** There were 112 dyads, comprised by a veteran and a family member or friend (224 participants in total).  
**Design:** Dyads were randomized to the following: (1) a novel intervention, Cognitive Applications for Life Management (CALM), involving goal management training plus mobile devices for cueing and training attentional control; or (2) Brain Health Training, involving psychoeducation plus mobile devices to train visual memory.  
**Results:** The clinical trial yielded negative findings regarding executive dysfunction but positive findings on measures of emotion dysregulation. Veterans randomized to CALM reported a 25% decrease in anger over 6 months compared with 8% reduction in the control (B = -5.27, P = .008). Family/friends reported that veterans randomized to CALM engaged in 26% fewer maladaptive interpersonal behaviors (eg, aggression) over 6 months compared with 6% reduction in the control (B = -2.08, P = .016). An unanticipated result was clinically meaningful change in reduced PTSD symptoms among veterans randomized to CALM (P < .001).  
**Conclusion:** This preliminary study demonstrated effectiveness of CALM for reducing emotional dysregulation in veterans with TBI and PTSD.


Resources to Empower Veterans Mental Health

Self-help materials can provide valuable education and support for Veterans who may be facing mental health challenges, their friends, and family members. There are a wide variety of self-help materials available and it can sometimes be difficult to select the most useful. VA has assembled a list of reviewer-recommended materials that may be helpful in finding the right option for you. For help in finding these materials, please click the “How to Use” tab.

Online Life Skills Training for Veterans

There are several free and anonymous on-line education and life coaching programs that use interactive exercises and video demonstrations to teach skills for overcoming life challenges. [http://www.veterantraining.va.gov/](http://www.veterantraining.va.gov/)

- **Anger Management**: This course is based on training that was developed for Veterans and has been successfully used by Veterans & Service Members around the world.
- **Moving Forward**: Moving Forward teaches Problem Solving skills to help you to better handle life’s challenges.
- **Veteran Parenting**: The biggest gap between you and your child may not be the physical distance. You can be right next door to your child and feel a thousand miles away.
- **Path to Better Sleep**: If you are experiencing sleep problems you do not have to let it control your life. This course is designed to help you develop habits that promote a healthy pattern of sleep.

DEPARTMENT OF MILITARY AND VETERANS AFFAIRS


The DMVA Resource Guide is produced and published by the North Carolina Department of Military and Veterans Affairs to assist and educate veterans in learning about state and federal veteran benefits. The 2018 edition is now available.
CBOC Mental Health Rounds

Each CBOC MH Rounds presentation is now offered twice a month:
Wednesday March 13 from 9-10 am ET & Thursday March 14 from 12-1 pm ET

Depression Treatment for Pregnant & Nursing Women

http://deploymentpsych.org/military-culture

Module 1:
Self-Assessment & Introduction to Military Ethos

Module 2:
Military Organization & Roles

Module 3:
Stressors & Resources

Module 4:
Treatment, Resources & Tools

http://www.aheconnect.com/citizensoldier

BRIDGING MILITARY AND COMMUNITY SERVICE SYSTEMS

This workshop series was developed by MIRECC faculty in collaboration with Citizen Soldier Support Program (CSSP) and North Carolina Area Health Education Center (NC AHEC). The web-based versions of the courses are all free at: http://www.aheconnect.com/citizensoldier

PACERS is an education program for health care staff in rural communities who care for Veterans with cognitive disorders and their caregivers. While this program targets rural health care staff, providers working in any setting can benefit from this information.

The PACERS online training curriculum includes six e-learning courses; each course is accredited for 1 hour of continuing education. There are also 5 videos that cover important topics related to cognitive impairment, including driving, self-neglect, challenging behaviors, Alzheimer’s disease, and end-of-life.

VA Providers: Take courses using TMS links  Non-VA Providers: Take courses using TRAIN links.

Course 1: Dementia and Delirium
Course 2: Identifying and Assessing for Dementia
Course 3: Treating Dementia - Case Studies
Course 4: Normal Cognitive Aging and Dementia Caregiving
Course 5: Addressing Decision Making and Safety in Dementia
Course 6: Dementia and Driving

VA Providers:

1 - Treating the Invisible Wounds of War (TTIWW)
   english & spanish editions
2 - TTIWW - A Primary Care Approach
3 - TTIWW - Employee Assistance in the CivilianWorkforce
4 - TTIWW - Issues of Women Returning from Combat
5 - TTIWW - Recognizing the Signs of mTBI during Routine Eye Examinations
6 - TTIWW - Understanding Military Family Issues
7 - TTIWW - Taking a Military History: Four Critical Questions

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**MIRECC Fellowships**

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