



## **Mid-Atlantic MIRECC (VISN 6) Mental Illness Research, Education and Clinical Center**

### **Overview**

The problem of post-deployment mental illness among Warfighters and veterans has been evident for many years. In 2005, the Veterans Administration addressed this issue by awarding the Mid-Atlantic Mental Illness Research, Education and Clinical Center, or MIRECC to a multidisciplinary team of clinicians, educators and researchers at VA Medical Centers and CBOCs in VISN 6. This VISN 6 MIRECC, along with others in the VA system, is charged with the goal of bringing best practices in mental health care into veteran-serving systems. The Mid-Atlantic MIRECC pursues methodologically-rigorous basic, clinical, epidemiological, and health-services research, produces clinical educational programs and products for health care providers, and conducts outreach information dissemination projects that seek to advance mental health care in the VA.

### **About Post-Deployment Mental Illness**

Accumulating evidence from epidemiologic and clinical studies of troops returning from Iraq and Afghanistan suggests that significant numbers of veterans suffer from symptoms of posttraumatic stress disorder (PTSD), mild to moderate traumatic brain injury (TBI), or both, and a variety of related health and behavioral health problems. These problems negatively affect the quality of life of returnees and their family members. The Department of Veterans Affairs is committed to providing the highest standard of care to returning veterans with post-deployment mental illnesses.

### **Mission**

The Mid-Atlantic MIRECC is organized as a translational medicine center in which the overarching goal is the clinical assessment and treatment of post-deployment mental illness and related problems, and the development of novel mental health interventions through basic and clinical research. This MIRECC aims: (1) To determine whether early intervention in post-deployment mental health is effective in forestalling the development or decreasing the severity of post-deployment mental illness, (2) To determine what neuroimaging, genetic, neurocognitive, or other characteristics predict the development of post-deployment mental illness, and (3) To assess the longitudinal course of post-deployment mental illness. The MIRECC's organizational structure includes three major components: Clinical, Research, and Education.

### **Research**

The Research component is composed of six core areas: intervention, health services, genetics, neuroimaging, neurocognitive, and neuroscience. The platform for much of the MIRECC's research is the recruitment of a large Registry of veterans from Operation Enduring Freedom and Operation Iraqi Freedom (OEF/OIF). These cores are tightly integrated so that knowledge gained from one area can be immediately applied in another area – for example, a patient's therapeutic response to a novel drug therapy.

### **Clinical**

The Clinical component seeks to define, model, champion and refine the continuum of care for OEF/OIF mental health needs via the public health model. In support of this goal, the clinical component serves as a key driver for the dissemination of evidence-based, actionable quality of

care elements across the Mid-Atlantic Healthcare Network and the Veterans Health Administration in close collaboration with Readjustment Counseling Service, DoD, local, state and regional community systems of care and informal community care networks.

### **Education**

The Education component develops educational materials and experiences to positively impact the mental health of OEF/OIF veterans. These projects target health care providers (both VA and non-VA), veterans, families, clergy, and community members both within VISN 6 and nationally. Methods of delivery include live presentations, print materials, recordings, and the web. The Education component seeks to translate best practices and challenging research concepts for other audiences in order to bridge the gap between research and clinical care.

### **Selected Studies and Projects**

- OEF/OIF Study Registry is based at the Durham VAMC but spans multiple VA sites. Enrollment in to the Registry involves screening participants for mental health status such as PTSD, Substance Use Disorders, Depression, Traumatic Brain Injury and a blood sample used for assessment of neurotransmitters and genetic markers of mental illness.
- In addition to the whole genome association (over 1100 individuals), we have recently investigated the serotonin (SLC6A4) and dopamine (SLC6A3) transporter genes, as both have previously been evaluated as candidate genes for several psychiatric disorders, including PTSD.
- Neuroactive Steroid Alterations as Candidate Biomarkers in PTSD and TBI in OEF/OIF Veterans: neuroactive steroid (NS) levels are altered in a number of psychiatric disorders, including PTSD. Alterations in NS levels may serve as potential biomarkers of PTSD risk and TBI sequelae.

### **Leadership**

Director – John A. Fairbank, PhD  
Education – Robin Hurley, MD  
Clinical - Harold Kudler, MD  
Research – William Schlenger, PhD  
Evaluation - Richard Weiner, MD, PhD  
Administrative – Perry Whitted  
Assistant Clinical - Kristy Straits-Troster, PhD  
Assistant Education - Katherine H. Taber, PhD  
Genetics - Jean C. Beckham, PhD  
Interventions - Christine Marx, MD  
Health Services - Patrick Calhoun, PhD  
Neuroscience - Scott D. Moore, MD, PhD  
Neuroimaging - Rajendra A. Morey, MD  
Neurocognitive - Larry A. Tupler, PhD

### **Contact**

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