



VISN 6 Mid-Atlantic MIRECC Post Deployment Mental Health



Editors: Katherine H. Taber, PhD
Robin A. Hurley, MD

Vol 3 (3) June 2007

MIRECC Leadership

Interim Director

Harold Kudler, MD
Harold.Kudler@med.va.gov

Co-Director - Education

Robin A. Hurley, MD
robin.hurley@med.va.gov

Assistant Co-Director - Education

Katherine H. Taber, PhD
katherine.taber@med.va.gov

Acting Co-Director - Research

Richard Weiner, MD, PhD
Richard.Weiner@med.va.gov

Acting Co-Director - Clinical

Kristy Straits-Troster, PhD
Kristy.Straits-Troster2@med.va.gov

Co-Director - Evaluation

Everett Jones, MD
Everett.Jones@med.va.gov

Interim Director - Special Fellowship in Advanced Psychiatry

Christine Marx, MD
marx0001@mc.duke.edu

Director, Special Fellowship in Advanced Psychology

Associate Director - Health Services
Patrick Calhoun, PhD
Patrick.Calhoun2@med.va.gov

Associate Director - Genetics

Jean C. Beckham, PhD
Jean.Beckham@med.va.gov

Associate Director - Interventions

Christine Marx, MD
marx0001@mc.duke.edu

Associate Director - Neuroscience

Scott D. Moore, MD, PhD
Scott.Moore2@med.va.gov

Associate Director - Neuroimaging

Rajendra A. Morey, MD
morey@biac.duke.edu

Associate Director - Neurocognitive

Larry A. Tupler, PhD
ltupler@duke.edu

VISN 6 Leadership

VISN 6 Director

Daniel F. Hoffmann, FACHE

Director - Mental Health Service Line

John E. Patrick

To Participate in Studies at Approved Research Sites Contact:

Durham VA

Study Coordinator
mireccstudies@va.gov
919-416-5915

Salisbury VA

Mary Ellena
mary.ellena2@va.gov
704-638-9000 ext 2956

Hampton VA

Carla Williams
carla.williams2@va.gov
757-722-9961 ext 2999

Registry Reaches 500!

Our MIRECC just celebrated a major milestone. The first research project we started was building a database (the Registry) for OEF/OIF veteran information. The Registry, which has been active only two years, just enrolled its 500th veteran! This project draws subjects from across VISN 6. Four VA medical centers (Durham, Salisbury, Hampton, and Richmond) are active research sites.

Veterans entering the Registry provide information about themselves and their experiences. They complete a set of mental health screening questionnaires and provide demographic and medical history information. They donate blood for use in genetic studies. If they want to be considered for future studies they also provide contact information.

The Registry is used in two ways. It provides summary information about the experiences and characteristics of OIF/OEF veterans. The Registry also serves as a recruitment source for new MIRECC studies. A very broad range of research is either active or planned for the future. These include both structural and functional neuroimaging studies, medication trials, and large scale genomic studies.

Here is a 'snap shot' of our first 500 veterans. The average for the group was 36.8 years of age and 13.8 years of education. The majority of the group served in a war zone (84%) and most (80%) were male.

Davidson Trauma Scale score

67% >27
59% >40

Combat Exposure Scale score

44% 0-8 (light)
19% 9-16
19% 17-24 (moderate)
14% 25-32
4% 33-41 (heavy)

Traumatic Life Events Questionnaire

79% Trauma during military
48% Physical attack/ violence
41% Childhood violence
14% Childhood sexual abuse
4.4 # traumatic events

Psychiatry Fellow Receives Award

Dr. Victoria M Payne received an Society of Biological Psychiatry



Travel Award to attend the annual meeting in May in San Diego, where she presented her research on neuroactive steroids in veterans who served during OEF/OIF. Her research indicates that higher levels of neuroactive steroids in the blood are associated with lower levels of psychiatric symptoms such as depression and PTSD. These findings are consistent with previous work suggesting that neuroactive steroids may have antidepressant and anti-anxiety actions. More severe symptoms of PTSD were found in veterans who has experienced a traumatic brain injury, suggesting a possible interaction between these two conditions. Smoking was associated with a higher level of psychiatric symptoms, highlighting the importance of controlling for this variable in research studies.

Publications

Calhoun PS, Dennis MF, Beckham JC. Emotional reactivity to trauma stimuli and duration of past smoking cessation attempts in smokers with posttraumatic stress disorder. *Exp Clin Psychopharmacol.* 2007 Jun;15(3):256-63.

Kudler H. The need for psychodynamic principles in outreach to new combat veterans and their families. *J Am Acad Psychoanal Dyn Psychiatry.* 2007 Spring;35(1):39-50.

Massing MW, Misiurek J, Chadaram SR, Marx CE, Madison R. New developments in proteomics. *N C Med J.* 2007 Mar-Apr;68(2):119-22.

(continued on page 3)

Invited Lectures

In February 2007, **Dr. Rajendra Morey** (Associate Director, Neuroimaging), **Dr. Chris Marx** (Associate Director, Interventions) and **Dr. Jennifer Strauss** jointly presented "The Ins and Outs of Mentored Career Awards" as a MIRECC webcast lecture.

In February 2007, **Dr. Scott Moore** (Associate Director, Neuroscience) presented "Response of the Amygdala Formation to Anxiolytic Agents" to the Department of Pharmacology, Physiology and Neuroscience, University of South Carolina School of Medicine, Columbia SC.

Dr. Marx presented "Proof-of-Concept Trial with the Neurosteroid Pregnenolone Targeting" and **Dr. Morey** presented "Neural Systems For Executive And Emotional Processing Are Modulated By Level Of Posttraumatic Stress Disorder Symptoms In Iraq War Veterans" at the Society for Biological Psychiatry 63rd Annual Scientific Meeting, May 17-19, San Diego, CA.

On May 22 **Dr. Robin Hurley** (Co-Director, Education) presented "Update on Functional Imaging in Neuropsychiatry" as part of the Advances in Neuropsychiatry and Clinical Neurosciences symposium at the 160th Annual Meeting of the American Psychiatric Association San Diego, CA.

On June 12 **Dr. Marx** presented "Neuroactive Steroids as New Agents for Intervention in Schizophrenia" as Grand Rounds during the First Annual Department of Psychiatry Research Symposium, University of Alabama, Birmingham.

On June 20 **Dr. Hurley** presented "Communicating with Families: TBI and Polytrauma" with Dr. David Cifu (Richmond VAMC) as part of the Clinician-Patient Communications Training Symposium held by VAMC EES in Chicago.

Dr. Rajendra Morey (Associate Director, Neuroimaging) and his colleagues are using functional magnetic resonance imaging to probe the effects of PTSD on brain functions. In this study, veterans who recently returned from deployment to Iraq and Afghanistan were presented with emotional combat-related scenes as well as neutral civilian scenes. In between the presentation of these scenes, veterans performed a decision making task.



Patterns of brain activity associated with each condition were analyzed. Activation of emotion processing regions of the brain (ventral frontolimbic cortex) while viewing combat-related pictures was positively correlated with level of PTSD symptoms. Thus, greater activation was seen in veterans with more severe PTSD symptoms. Conversely, activation in the decision making regions of the brain (dorsolateral prefrontal cortex) during the decision making task was negatively correlated with PTSD symptoms. This research shows there is a strong link between the subjectively-assessed clinical symptoms of PTSD and objective neurobiological markers.

Recent Presentations

Naylor JC, Payne VM, Hulette CM, Shampine LJ, Stevens RD, Ervin JF, Massing MW, Lieberman JA, Blazer, DG, Steffens DC, Marx CE. *Cerebrospinal Fluid DHEA Levels are Elevated in Alzheimer's Disease, Related to Neuropathological Disease Stage, and Correlated with Brain DHEA Levels.* Society for Biological Psychiatry 63rd Annual Scientific Meeting, May 1-3, 2008, Washington D.C.

Payne VM, Morey RA, Hamer RM, Tupler LA, Calhoun PS, Beckham JC, Shampine LJ, Naylor JC, Strauss JL, Massing MW, Connor KM, Davidson JRT, Marx CE. *Neuroactive Steroids are Related to Psychiatric Symptoms In Veterans Returning From Iraq and Afghanistan.* Society for Biological Psychiatry 63rd Annual Scientific Meeting, May 1-3, 2008, Washington D.C.



DoD/ DVA Traumatic Brain Injury (TBI) Planning Conference

May 22-24, 2007 Bethesda, MD



Dr. Katherine Taber (Assistant Co-Director, Education) was an invited participant at a meeting sponsored by DoD that included representatives of the Military Health System, Veterans Administration and Defense and Veterans Brain Injury Center. Discussions encompassed a wide range of topics including definitions, symptomatic taxonomy, treatments, assessments, research, and education.

Publications

(continued from page 2)

Taber KH, Hurley RA. Traumatic axonal injury: atlas of major pathways. *J Neuropsychiatry Clin Neurosci*. 2007 Spring;19(2):iv-104.

Zuchner S, Roberts ST, Speer MC, Beckham JC. Update on psychiatric genetics. *Genet Med*. 2007 Jun;9(6):332- 340.

Noon V-tel Lecture Schedule:

July 13

Dr. Theodore Wright (**Salem VAMC**)
PREFS: Post-Deployment Readjustment Education for Families and Soldiers

August 10

Dr. Jacqueline Friedman and START team (**Salisbury VAMC**)
Developing a Couples Workshop for OIF/OEF Veterans

This series is presented by V-tel and audio conferences. We are having increasing participation from sites outside VISN 6. Our assigned call in numbers may change, depending upon how many sites expect to join in. For this reason, the number that each VISN 6 site will use to dial in will be included in an email notification prior to each presentation.

If you wish to attend from a site outside of VISN 6, please contact Mary Ellena (mary.ellena2@va.gov; 704-638-9000 ext 2956) so she can make the necessary arrangements.