



Department of Veterans Affairs Employee Education System and
The National Center for Posttraumatic Stress Disorder (NCPTSD)

present

#### COURSE NO. 07.ST.MH.PTSD1019.A

# NEUROBIOLOGY & PHARMACOTHERAPY FOR POSTTRAUMATIC STRESS DISORDER (PTSD)

## EES WEB-BASED TRAINING EDUCATIONAL ACTIVITY

Originally Released February 1, 2007

Review October 1, 2008

Expiration October 1, 2009

# **Purpose**

This presentation has two principal objectives. First it will review the psychobiology of the human response to stress in order to establish the pathophysiological rationale for utilizing different classes of medications, that act at specific pharmacological target sites, as potential treatments for PTSD. Second it will review the current literature on evidence-based pharmacotherapy for PTSD. New medications currently being tested will also be discussed. This course provides a solid background for understanding the effects of combat stress/trauma on the human physiological stress systems and provides an overview of pharmacological treatments and mechanisms of action.

After viewing the presentation, the participant will be able to:

- 1. identify the major components of the human stress system
- 2. consider their implications in the development and treatment of PTSD and other combat-stress reactions.
- 3. identify the major neurotransmitters and pathways (such as norepinephrine, serotonin, gaba, glutamate)
- 4. consider their implications in the development and treatment of PTSD.
- 5. report the major pharmacological interventions and their likely mechanisms of action in the care of clients with PTSD/combat stress reactions.



Mental health leadership/clinicians, OIF/OEF outreach coordinators and clinical managers, psychiatrists, psychologists, social workers, nurses, primary care clinicians, and others involved in the provision of services, outreach/communication, or program planning for veteran populations (such as OIF/OEF) and others who have suffered traumatic stress.

# **Accreditation Council for Continuing Medical Education (ACCME)**

The VA Employee Education System is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians.

# **American Nurses Credentialing Center (ANCC)**

VA Employee Education System is accredited as a provider of continuing nursing education by the American Nurses Credentialing Center's Commission on Accreditation.

## California Board of Registered Nursing (CA BRN)

The VA Employee Education System is accredited as a provider of continuing education in nursing by the California Board of Registered Nursing.

# American Psychological Association (APA)

The VA Employee Education System (EES) is approved by the American Psychological Association to sponsor continuing education for psychologists. The Employee Education System maintains responsibility for this program and its content.

#### **Accreditation Council for Continuing Medical Education (ACCME)**

The VA Employee Education System designates this educational activity for a maximum of 1.0 *AMA PRA Category 1 Credit(s)*  $^{TM}$ . Physicians should only claim credit commensurate with the extent of their participation in the activity.

## **Association of Social Work Boards (ASWB)**

VA Employee Education System, Provider Number 1040, is approved as a provider for social work continuing education by the Association of Social Work Boards (ASWB), (1-800-225-6880) through the Approved Continuing Education (ACE) program. VA Employee Education System maintains responsibility for the program. Social workers will receive 1.0 continuing education clock hours in participating in this course

#### **American Nurses Credentialing Center (ANCC)**

VA Employee Education System designates this educational activity for 1.0 contact hours in continuing nursing education.

<u>NOTE</u>: The California (CA) Board of Registered Nursing (BRN) will not accept ANCC credit toward the renewal of CA licensure, unless the CA licensed nurse-participants are physically outside of the state of CA when they commence and complete ANCC accredited educational activities.



# California Board of Registered Nursing (CA BRN)

This continuing education activity has been presented by the VA Employee Education System for 1.0 contact hours. Provider approved by the California Board of Registered Nursing: Provider Number **CEP 4714**.

## American Psychological Association (APA)

As an organization approved by the American Psychological Association, the VA Employee Education System is sponsoring this activity for 1.0 hours of continuing education credit. The Employee Education System maintains responsibility for this program and its content. This program is co-sponsored by the VA Employee Education System and the National Center for Posttraumatic Stress Disorder (NCPTSD). The VA EES is approved by the American Psychological Association to sponsor continuing education for psychologists. The VA EES maintains responsibility for this program and its content.

A certificate of attendance will be awarded to participants and accreditation records will be on file at the Employee Education System. In order to receive a certificate from EES, participants must: register and complete an evaluation online; participate in 100% of the educational activity; and generate, per instructions, their own certificate at the conclusion of the activity. EES cannot issue certificates for less than 100% participation, as required by accrediting body regulations.

It is the program participant's responsibility to ensure that this training is documented in the appropriate location according to his/her locally prescribed process.

# Faculty and Planning Committee

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- \* Denotes planning committee
- + Denotes faculty

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**Application** Participants must:

**Procedure:** Access the course via the National Center for Posttraumatic Stress

Disorder website at: http://www.ncptsd.va.gov/ptsd101/index.html

After completing this course, participants should click on the link to the Librix, which appears at the very end of the course to access the external site at <a href="https://www.ees-learning.net/librix/loginhtml.asp">https://www.ees-learning.net/librix/loginhtml.asp</a> or internal site at <a href="https://www.ees.aac.va.gov/librix/loginhtml.asp">https://www.ees.aac.va.gov/librix/loginhtml.asp</a>

A certificate of completion cannot be printed until the post-test and evaluation are completed. A link to print a certificate can be accessed at the end of the course evaluation.

A score of 80 percent on the post-test is required before a certificate can be printed.

• The test takes approximately 1 hour to complete. Post-test scores are available immediately after the post-test is completed. There is no limit on the number of times a participant may take the post-test to receive a passing score.

To access the course online, click here:



# http://www.ncptsd.va.gov/ptsd101/index.html

Deadline Date:

This program will no longer be authorized for continuing education credit after September 30, 2009. Information on participation may be obtained from Linda Truman, Project Manager, St. Louis Employee Education Resource Center, 1 Jefferson Barracks Drive, Bldg. 2, phone 314-894-5736.

The Rehabilitation Act of 1973, as amended: The Employee Education System wishes to ensure no individual with a disability is excluded, denied services, segregated or otherwise treated differently from other individuals participating in its educational activities, because of the absence of auxiliary aids and services. If you require any special arrangements to attend and fully participate in this educational activity, please contact Linda Truman, Project Manager, EES, St. Louis Employee Education Resource Center, phone 314-894-5736, e-mail Linda.truman1@va.gov.

# Disclosure(s)

The VA Employee Education System (EES) must insure balance, independence, objectivity, and scientific rigor in all its individually sponsored or jointly EES sponsored educational activities. All prospective faculty & planning committee members participating in an EES activity must disclose any relevant financial interest or other relationship with: (a) the manufacturer(s) of any commercial product(s) and/or provider(s) of commercial services discussed in an educational presentation, and (b) any commercial supporters of the activity. Relevant financial interest or other relationship includes but is not limited to such things as personal receipt of grants or research support, employee or consultant status, stock holder, member of speakers bureau, within the prior 12 months. EES is responsible for collecting such information from prospective planners and faculty, evaluating the disclosed information to determine if a conflict of interest is present and, if a conflict of interest is present, to resolve such conflict. Information regarding such disclosures and the resolution of the conflicts for planners and faculty shall be provided to activity participants. When an unlabeled use of a commercial product or an investigational use not yet approved by the FDA for any purpose is discussed during an educational activity, EES shall require the speaker to disclose that the product is not labeled for the use under discussion or that the product is still investigational.

Each faculty and planning committee member reported having no relevant \* financial relationships with any commercial interest. This activity includes no discussion of uses of FDA regulated drugs or medical devices which are experimental or off-label.

\*The ACCME defines "relevant financial relationships" as financial relationships in any amount occurring within the past 12 months that creates a conflict of interest.

For more information about the products and services provided by the Employee Education System (EES), visit our website at <a href="http://vaww.ees.lrn.va.gov/">http://vaww.ees.lrn.va.gov/</a>.