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# Information for Participants

Objectives: After evaluating a specific journal article, participants should be able to demonstrate an increase in their knowledge of clinical medicine. Participants should be able to understand the contents of a selected research or review article and to apply the new findings to their clinical practice.

Participants: This program is designed for all psychiatrists in clinical practice, residents in Graduate Medical Education programs, medical students interested in psychiatry, and other physicians who wish to advance their current knowledge of clinical medicine.

Explanation of How Physicians Can Participate and Earn Credit: In order to earn CME credit, subscribers should read through the material presented in the article. After reading the article, complete the CME quiz online at cme.psychiatryonline.org and submit your evaluation and study hours (up to 1 AMA PRA Category 1 Credit<sup>TM</sup>).

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#### Information on Courses

Title: Explanatory Models for Psychiatric Illness

Faculty: Kenneth S. Kendler, M.D.

Affiliations: Virginia Institute of Psychiatric and Behavioral Genetics and Departments of Psychiatry and Human Genetics, Medical College of Virginia/Virginia Commonwealth University.

Disclosures: The author reports no competing interests.

Discussion of unapproved or investigational use of products\*: None

Title: Individual and Societal Effects of Mental Disorders on Earnings in the United States: Results From the National Comorbidity Survey Replication

Faculty: Ronald C. Kessler, Ph.D., Steven Heeringa, Ph.D., Matthew D. Lakoma, M.P.H., Maria Petukhova, Ph.D., Agnes E. Rupp, Ph.D., Michael Schoenbaum, Ph.D., Philip S. Wang, M.D., Dr.P.H., Alan M. Zaslavsky, Ph.D.

Affiliation: Department of Health Care Policy, Harvard Medical School (R.C.K., M.D.L., M.P., A.M.Z.); University of Michigan Institute for Social Research (S.H.); National Institute of Mental Health (A.E.R., M.S., P.S.W.).

Disclosures: Prof. Kessler has been a consultant for AstraZeneca, Bristol-Myers Squibb, Eli Lilly, GlaxoSmithKline, Pfizer, Sanofi-Aventis, and Wyeth and has received research support from Bristol-Myers Squibb, Eli Lilly, Ortho-McNeil, Pfizer, and the Pfizer Foundation. The remaining authors report no competing interests.

Discussion of unapproved or investigational use of products\*: None

Title: Reduced Amygdala Response to Fearful Expressions in Children and Adolescents With Callous-Unemotional Traits and Disruptive Behavior Disorders

Faculty: Abigail A. Marsh, Ph.D., Elizabeth C. Finger, M.D., Derek G.V. Mitchell, Ph.D., Marguerite E. Reid, Courtney Sims, David S. Kosson, Ph.D., Kenneth E. Towbin, M.D., Ellen Leibenluft, M.D., Daniel S. Pine, M.D., R.J.R. Blair, Ph.D.

Affiliations: National Institute of Mental Health (A.A.M., E.C.F., M.E.R., C.S., D.S.K., K.E.T., E.L., D.S.P., R.J.R.B.); Department of Psychiatry and Department of Anatomy and Cell Biology, University of Western Ontario (D.G.V.M.); and Department of Psychology, Rosalind Franklin University of Medicine and Science (D.S.K.).

Disclosures: All authors report no competing interests.

Discussion of unapproved or investigational use of products\*: None

<sup>\*</sup> American Psychiatric Association policy requires disclosure by CME authors of unapproved or investigational use of products discussed in CME programs. Off-label use of medications by individual physicians is permitted and common. Decisions about off-label use can be guided by scientific literature and clinical experience.

### Exams are available online only at cme.psychiatryonline.org

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**Estimated Time to Complete: 1 Hour** 

Begin date June 1, 2008 - End date June 31, 2010

### **EXAMINATION QUESTIONS**

Select the single best answer for each question below.

### **Explanatory Models for Psychiatric Illness**

Kenneth S. Kendler, M.D. Am J Psychiatry 2008; 165:695-702

**OUESTION 1.** Rather than viewing psychiatric illnesses from a single perspective, a more effective scientific approach that fits with a multicausal framework involves which of the following methods?

- A. Hard reduction.
- B. Decomposition followed by integration.
- C. Hard emergence.
- D. Discovery of fundamental laws.

**QUESTION 2.** Which of the following statements is consistent with the best current information about the etiology of alcohol dependence?

- A. Exposure to ethanol produces physiological tolerance due to increased CNS sensitivity
- B. Prenatal exposure to alcohol has no effect on risk for alcohol depen-
- C. Top-down causation has not been demonstrated in the offspring of alcoholic parents.
- D. Risk for dependence is robustly predicted by social factors such as peer substance use and social class

**QUESTION 3.** Which of the following best describes the "reverse-engineering" approach to brain/mind functioning?

- A. Integrating logical, psychological, and social elements into causal loops using law-based models of science.
- B. Identifying the purpose of a neural system as the first step before working backwards to understand the activity of relevant components.
- C. Identifying the activities of neural systems individually as a means of understanding how they fall together.
- D. Approaching causal processes from a unitary perspective and a set of laws that are common to all neural systems.

## **EVALUATION QUESTIONS**

This evaluation form is adapted from the MedBiquitous Journal-Based Continuing Education Guidelines 28 November 2005. This evaluation will appear online at the end of each CME course. Participants must complete this evaluation in order to receive credit. Select the response which best indicates your reaction to the following statements about this activity.

**STATEMENT 1.** The activity achieved its stated objectives.

- 1. Strongly agree
- 2. Agree
- 3. Neutral
- 4. Disagree
- 5. Strongly disagree

**STATEMENT 2.** The activity was relevant to my practice.

- 1. Strongly agree
- 2. Agree
- 3. Neutral
- 4. Disagree
- 5. Strongly disagree

STATEMENT 3. I plan to change my current practice based on what I learned in the activity.

- 1. Strongly agree
- Agree
- 3. Neutral
- 4. Disagree 5. Strongly disagree

**STATEMENT 4.** The activity validated my current practice.

- 1. Strongly agree
- 2. Agree
- 3. Neutral
- 4. Disagree
- 5. Strongly disagree

**STATEMENT 5.** The activity provided sufficient scientific evidence to support the content presented.

- 1. Strongly agree
- 2. Agree
- 3. Neutral
- 4. Disagree
- 5. Strongly disagree

STATEMENT 6. The activity was free of commercial bias toward a particular product or company.

- 1. Strongly agree
- 2. Agree
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**Estimated Time to Complete: 1 Hour** Begin date May 1, 2008 – End date April 31, 2010

### **EXAMINATION QUESTIONS**

Select the single best answer for each question below.

# Individual and Societal Effects of Mental Disorders on Earnings in the United States: Results From the National Comorbidity Survey Replication

Ronald C. Kessler et al. Am J Psychiatry 2008; 165:703-711

QUESTION 1. What is the average difference in earnings each year between a person with a serious mental illness and a person of similar age and sex without a serious mental illness?

A. \$9,500

B. \$12,210

C. \$16,306

D. \$20,542

QUESTION 2. Which of the following describes the factors accounting for the association of lower earnings among persons with mental illness compared to those without mental illness in the National Comorbidity Survey Replication (NCS-R)?

- A. Three-fourths of the total association was due to lower earnings among employed persons with mental illness.
- B. The association was equally due to lower earnings as well as absence of any earnings among persons with mental illness.
- C. Three-fourths of the total association was due to the absence of employment among persons with mental illness.
- D. This study did not decompose the effects due to lower wages from the effects versus having no employment at all.

QUESTION 3. What is the total estimated cost of serious mental illness to the U.S. economy each year in terms of lost earnings?

A. \$131.3 billion

B. \$293.2 billion

C. \$179.6 billion

D. \$193.2 billion

## **EVALUATION QUESTIONS**

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**Estimated Time to Complete: 1 Hour** 

Begin date June 1, 2008 - End date June 31, 2010

# **EXAMINATION QUESTIONS**

Select the single best answer for each question below.

# Reduced Amygdala Response to Fearful Expressions in Children and Adolescents With Callous-Unemotional Traits and Disruptive Behavior Disorders

Abigail A. Marsh et al. Am J Psychiatry 2008; 165:712-720

QUESTION 1. Among children with callous-unemotional traits and disruptive behavior disorders, impaired processing occurs in which of the following social cues?

- A. Cues related to anger.
- B. Cues related to social dominance.
- C. Cues related to distress.
- D. Cues related to happiness.

QUESTION 2. Functioning in which of the following brain structures is most closely associated with an intact ability to recognize fearful facial expressions?

- A. amygdala.
- B. cerebellum.
- C. insula.
- D. thalamus.

QUESTION 3. The ventromedial prefrontal cortex processes information from the amygdala in which of the following ways?

- A. Integrates it with input from the occipital cortex.
- B. Uses it to guide behavioral responses.
- C. Uses it to direct attention.
- D. Stores it in long-term memory.

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