

# Euro Global Summit and Medicare Expo on Psychiatry

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## The seminal role of child abuse and neglect in predicting course and treatment response in mood and anxiety disorders: Neurobiology and genetics

Brain imaging, neuroendocrine and neurotransmitter studies have revealed the many long-term biological consequences of child abuse and neglect. These changes underlie the increased vulnerability to mood and anxiety disorders in adulthood. Our group and others have demonstrated a number of long term neurobiological consequences of child abuse and neglect including structural and functional brain imaging changes, neuroendocrine and immune alterations. In particular, alterations in the hypothalamic-pituitary-adrenal (HPA) axis, the major mediator of the mammalian stress response, contribute to the long standing effects of early life trauma. However, not all exposed individuals demonstrate altered HPA axis physiology, suggesting that genetic variations influence the psychiatric consequences of trauma exposure. Variants in the genes encoding the CRF R1 receptor, FKBP5, PAC1, oxytocin receptor, and others interact with adverse early environmental factors to predict risk for stress-related psychiatric disorders. Epigenetic mechanisms have now been shown to play a seminal role in mediating the effects of early life stress. These studies have suggested new molecular targets for drug development, biological risk factors, and predictors of treatment response. Patients with a history of child abuse and neglect exhibit a more severe disease course in terms of earlier age of onset and symptom severity, and exhibit a poorer treatment response to both psychopharmacological and psychotherapeutic treatments. Recognition of the biological consequences and clinical impact of trauma has critical importance for clinical service delivery, treatment research, and public health policy.

### Biography

Charles B Nemeroff was Professor of Psychiatry and Pharmacology and Chief of the Division of Biological Psychiatry before relocating in 1991 to Emory University School of Medicine in Atlanta, Georgia, where he served as the Reunette W. Harris Professor and Chairman of the Department of Psychiatry and Behavioral Sciences until 2008. In 2009 he joined the University of Miami Leonard M. Miller School of Medicine as the Leonard M. Miller Professor and Chairman of the Department of Psychiatry and Behavioral Sciences. His research has concentrated on the biological basis of the major neuropsychiatric disorders, including affective disorders, schizophrenia, and anxiety disorders. His clinical research is focused on the use of genetic, neuroendocrine, neuroimaging and neurochemical methods to comprehensively understand the pathophysiology of depression. He has received numerous honors including the A.E. Bennett Award from the Society of Biological Psychiatry (1979), the Judith Silver Memorial Young Scientist Award from the National Alliance for the Mentally Ill (1989), both the Kempf Award in Psychobiology (1989) and the Samuel Hibbs Award (1990) from the American Psychiatric Association, and the Gold Medal Award and the Research Prize (1996) from the Society of Biological Psychiatry. In 1993 he was awarded the Edward J. Sachar Award from Columbia University and the Edward A. Strecker Award from The Institute of Pennsylvania Hospital. In 1997, he was the recipient of the Gerald Klerman Award from the National Depressive and Manic-Depressive Disorders Association and the Selo Prize from the National Alliance for Research in Schizophrenia and Depression and many more. He served as chair of the APA Committee on Research Training. In 2002 he was elected as a member of the Institute of Medicine of the National Academy of Sciences. He has published more than 975 research reports and reviews.

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