Genes Linked to Anxiety Disorders

VISN 1 MIRECC geneticists have discovered a link between genes and risk for two of the most severe anxiety conditions: Panic Disorder and Agoraphobia. Patients with Panic Disorder are troubled by attacks of severe, disabling anxiety. Agoraphobia is the fear of situations in which escape might be difficult such as being in crowds, bridges or tunnels. These scientists used a new "genome scan" technology which searched through the total pool of human genes to find the ones most likely to play a role in the two anxiety disorders. Genome scan technology has only recently become available and this is the first genome scan study for Agoraphobia and only the third for Panic Disorder. Panic disorder was linked to the cholecystokinin B receptor and Agoraphobia was linked to a location on chromosome 3.

Discovering the genes that are linked to mental illness can have long-range payoff in two ways. First, genetic screening methods can identify patients most likely to respond to treatments. Using genetic testing, doctors can find the right drug for each particular person and rely less on trial and error in selecting treatments. Second, by identifying genes responsible for an illness, scientists find new information about abnormal processes causing disease. One of the most promising strategies for discovering new medicines is to find genetic targets for the drugs to attack to interrupt the disease process. This new method of developing genetically derived treatments promises to open up a new era of treatment mental illness. At present, the greatest progress has been made in finding new treatments for Alzheimer's Disease, a severe brain condition causing memory loss and confusion most commonly in older people. However, research studies such as this hold the promise to pave the way for new treatments of anxiety disorders as well. The research team is headed by MIRECC researcher Joel Gelernter and includes researchers from VA Connecticut, Yale University School of Medicine and Medical University of South Carolina.