DHHS



NIH





- Neuroscience and Basic Behavioral Science
- Developmental Translational Research
- Adult Translational Research
- Epidemiology, Services and Intervention Research



IOM Report (2012) Epilepsy Across the Spectrum

Comorbid Conditions Associated with Epilepsy Mental Health conditions

- Mood Disorders (Depression)
- Anxiety Disorders
- Alcohol-related disorders
- ADHD
- Schizophrenia
- Personality disorders
- Suicidality
- Seizure-like events with psychological basis



Significance of Epilepsy-Depression Comorbidity

- Prevalence of depression in temporal lobe epilepsy may reach as high as 50%
- Prevalence of depression in epilepsy is higher than in patients with other chronic diseases such as diabetes or asthma
- Temporal lobe epilepsy patients with depression report depression has greater negative impact on quality of life than the seizures themselves
- Comorbidity with depression carries a high incidence of suicide



Explore origins, mechanisms, and potential biomarkers of temporal lobe epilepsy-related depression

- Develop and exploit animal models (febrile status epilepticus)
- Test if seizures induce the activation of depression-related neural circuitries
- Test if pharmacologic intervention at early developmental time points can prevent or reverse depression symptoms