NIH Support of Research on the Co-Morbidities of Epilepsy

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NINDS, NIH
Benchmarks Area III: Prevent, limit, and reverse the co-morbidities associated with epilepsy and its treatment.

- Identify and characterize the full range and age specificity of co-morbidities in people with epilepsy.
- Identify predictors and underlying mechanisms that contribute to co-morbidities.
- Determine the optimal treatments for the neuropsychiatric and cognitive co-morbidities in people with epilepsy.
- Prevent or limit other adverse consequences occurring in people with epilepsy.
- Develop effective methods for diagnosis, treatment and prevention of non-epileptic seizures (NES).
Benchmarks Area III: Prevent, limit, and reverse the co-morbidities associated with epilepsy and its treatment.
Identify and characterize the full range and age specificity of co-morbidities in people with epilepsy.

- **NINDS**
  - Long-Term Outcomes of Childhood-Onset Epilepsy, Anne Berg, Children’s Memorial Hospital
  - Neuropsychological Progression in New Onset Epilepsy, Bruce Hermann, University of Wisconsin Madison
  - Mechanisms of Cognitive Impairment Following Early-Life Seizures, Greg Holmes, Dartmouth
  - Understanding the Cognitive Impact of Early Life Epilepsy, Frances Jensen, Children’s Hospital Boston (NINDS & OD)
  - Longitudinal Neuroimaging in Sturge-Weber Syndrome, Casaba Juhasz, Wayne State University

- **NIA**
  - Mechanisms and Treatment of Network Dysfunction in Alzheimer's Disease, Keith Vossel, J. David Gladstone Institutes
Identify predictors and underlying mechanisms that contribute to co-morbidities.

- NINDS
  - Functional Brain Mapping in Pediatric Neurosurgery, Eishi Asano, Wayne State University
  - Imaging the Effect of Centrtemporal Spikes and Seizures on Language in Children, Jennifer Vannest, Children’s Hospital Medical Center Cincinnati
  - Consequences of Prolonged Febrile Seizures in Childhood, Shlomo Shinnar, Montefiore Medical Center
  - Mechanisms of Comorbidity Between Epilepsy and Depression, Andrey Mazarati, UCLA
Determine the optimal treatments for the neuropsychiatric and cognitive co-morbidities in people with epilepsy.

- NINDS
  - Radiosurgery vs Lobectomy for Temporal Lobe Epilepsy: Phase 3 Clinical Trial, Nicholas Barbaro, UCSF
  - Impact of Initial Therapy and Response on Long Term Outcome in Children with CAE, Tracy Glauser, Children’s Hospital Medical Center Cincinnati
Prevent or limit other adverse consequences occurring in people with epilepsy.

- **NINDS**
  - Prevention and Risk Identification of SUDEP Mortality - the PRISM Project, Samden Lhatoo, Case Western Reserve University
  - Predictive Genes, Mechanisms, and Clinical Biomarkers of SUDEP, Jeff Noebels, Baylor
  - Copy Number Variants of Neuro-Cardiac Ion Channel Genes and the Risk of SUDEP, Alica Goldman, Baylor
  - Serotonin Neurons in Arousal, Epilepsy and SUDEP, Gordon Buchanon, Yale University
  - Cardiac Dysfunction in Epilepsy: A Candidate Mechanism in Sudden Unexpected Death, Anne Anderson, Baylor

- **NHLBI**
  - Excitability Mechanisms of Neurocardiac Regulation, Albert Glasscock, Baylor
Develop effective methods for diagnosis, treatment and prevention of non-epileptic seizures (NES).

None
National Institute of Nursing Research (NINR)

- Chronic Illness Self-Management in Children and Adolescents: PA-11-070, -071, -072
- Focal Cognitive Deficits in CNS Disorders: PA-11-067, -068, -069
National Institute of Arthritis and Musculoskeletal and Skin Diseases (NIAMS)

- NIAMS has supported Alison Pack’s research, leading to the following articles:

  - Normal vitamin D and low free estradiol levels in women on enzyme-inducing antiepileptic drugs.

  - Treatment of epilepsy to optimize bone health.

  - Neuroendocrinological aspects of epilepsy: important issues and trends in future research.
Eunice Kennedy Shriver National Institute for Child Health and Human Development (NICHD)

- NICHD co-sponsored the recent Autism-Epilepsy Workshop
- NICHD Intellectual and Developmental Disabilities Research Centers 2010 (P30) program

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Questions?