

**Epilepsy Research Foundation
New Therapy Grants**

Meritorious Research - Spring 2009

Nandor Ludvig, M.D., Ph.D.
Associate Professor
New York University School of Medicine
New York, NY, United States

Award: \$180,000/ 2 years

Application Title:

Safety Profile of the Subdural Hybrid Neuroprosthesis for Focal Epilepsy

General Audience Summary:

This project will determine the safety of a new medical device, the subdural Hybrid Neuroprosthesis, for the treatment of drug resistant, surgically untreatable focal epilepsies. The device will deliver muscimol or other seizure-controlling drugs directly into the cortical seizure focus via the subdural space to prevent seizures without side-effects. The safety of this emerging epilepsy therapy will be tested in monkeys, so that the device can be implanted in the same way as in humans and generated data can be relevant to human conditions.

Catherine Schevon, M.D.
Assistant Professor
Columbia University Medical Center
New York, NY, United States

Award: \$98,691/ 1 year

Application Title:

Clinical EEG Acquisition System with Online Fast Ripple Detection

General Audience Summary:

High frequency oscillations in the brain can identify areas for epilepsy surgery treatments, but are technically difficult to detect. The investigator's system can bring automatic online HFO detection into clinical practice, making current surgical treatments more effective, and potentially simplifying surgeries for many epilepsy syndromes.