

Award Roster

Health Sciences Student Fellowship FY2008

Name: Janice Lenzer
Institution: Queens College/CUNY jointly with Research Fdn/CUNY
Project: Long-term effects of VEGF on seizure sequelae
Preceptor: Susan Croll-Kalish
Lay Summary: Epilepsy has been associated with a loss of brain cells, especially in limbic regions such as the hippocampus. Loss of these cells is associated with behavioral problems such as memory loss and emotional abnormalities. We have previously reported that the growth factor VEGF protects brain cells from damage caused by seizures in an animal model, but administration of this protein to the brain for long periods of time presents technical challenges. We propose here to test the potential of VEGF gene therapy to protect brain cells during seizures, and to subsequently protect against behavioral impairments in learning, memory, and anxiety.
Award Amount: \$3,000

Name: Isaac Naggar
Institution: The Research Foundation of SUNY on behalf of SUNY Downstate Medical Center
Project: Relationship of Peripheral ANS Activity and Limbic Cortical Seizures
Preceptor: Mark Stewart
Lay Summary: Seizures beginning in a specific region in the brain called the limbic cortex can exert a marked effect on the nervous system and ultimately the cardiovascular system, sometimes leading to death. Through computer analysis of brain and nerve electrical recordings taken from rats with seizures, we will define the relationship between seizure activity in the limbic cortex and abnormal activity on nerves controlling the heart. An understanding of the relationship between seizures, peripheral autonomic nerve activity, and the resulting cardiovascular effects will provide important insights into the mechanisms of seizure spread and the impact of seizures on the heart.
Award Amount: \$3,000