

Musto Lab 2010



Lab Members; **Dr. Alberto Musto**, **Dr. John Sfondouris**, Post doctoral fellow, **Dr. Tabitha M. Quebedeaux**, and **Eric Miller**, medical student.

Dr. Musto draws on his background in clinical neurology in designing and testing his hypotheses. He uses in vivo animal models of experimental epilepsy in his novel systematic approach to study epileptogenesis. Dr. Musto incorporates behavioral procedures, state-of-the-art in vivo electrophysiology, immunohistological techniques, biochemical protocols, and novel chemical compounds in his experiments, and he analyzes and interprets the resulting experimental data within a mechanistic framework. His cutting-edge research could provide reliable biomarkers for epileptogenesis, result in new methods for predicting and/or preventing seizures, and translate into new treatments for patients with epilepsy or seizure disorders.

Dr. Musto integrates his knowledge regarding the pathophysiology of neurological disorders involved in brain circuitry impairments, such as epilepsy and sleep disorders. He has a strong clinical background and outstanding investigation techniques that he applies in his epilepsy research. He has exceptional experience with animal models of experimental neurology, new technologies for brain electrical activity, novel drugs and delivery systems, and brain morphology. Dr. Musto has fostered productive collaboration with other neuroscience investigators, as reflected by publications in peer-reviewed manuscripts and book chapters, and patents. For example, his collaborative efforts with Dr. Gyorgy Buzsaki (Rutgers, The State University of New Jersey) have allowed him to apply state-of-the-art silicon probe techniques in his studies of epileptogenesis.

Lab Members:



John Sfondouris, M.D.
(Postdoctoral fellow)



Tabitha M. Quebedeaux, M.D.
(M.D., Ph.D. Program – GPA: 3.846)
LSUHSC School of Medicine
Neuroscience Center of Excellence
Mentors: Dr. Nicolas Bazan and Dr. Alberto Musto



Tabitha Quebedeaux's Thesis Presentation

Left to right front: Walter Lukiw, Alberto Musto, Tabitha Quebedeaux, Carmen Canavier, Nicolas Bazan, Second Row: Joseph Moerschbaeche, Ted Weyand, March 16, 2011

"Dentate Gyrus Hyperexcitability Following Status Epilepticus: Characterization and Attenuation by Neuroprotectin D1"