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11:30am - 1:00pm

CKB 217

"THE IMPLICATION OF TLR4 ON THE LONG - TERM DEVELOPMENT OF POST-TRAUMATIC EPILEPSY"

Abstract:

Epilepsy plagues approximately 3.4 million individuals in the US, and a percentage are acquired due to traumatic brain injury (TBI). While pharmacological interventions targeting voltage-gated ions channel activity and neurotransmitter release have been moderately successful in suppressing seizure frequency, no therapeutics to date prevent the development of post-traumatic epilepsy (PTE). Clinical evidence indicates that secondary sequelae such as neuroinflammation play a role in PTE. This study examines the role of one such inflammatory mediator, TLR4, in modulating dentate, cellular and molecular changes underlying long-term seizure susceptibility after TBI.

About the Speaker

I am a Biomedical Engineering Doctorate candidate in the Department of Pharmacology, Physiology and Neuroscience at the Rutgers, Graduate School of Biomedical Sciences. I obtained my Master's degree from New Jersey Institute of Technology in 2012 in Biomedical Engineering. The focus of my research has been the effects of traumatic brain injury on acute and long-term neuronal activity.