

Faculty Name:

Barclay Morrison

Faculty Email:

bm2119@columbia.edu

Lab:

Neurotrauma and Repair Laboratory

Project Title:

Characterizing effects of repeated low-level blast on organotypic hippocampal slice cultures

Description:

Exposure to shock waves in military training has been the topic of growing concern that repeated exposure may be capable of inflicting neurocognitive deficits. In vitro experiments using organotypic hippocampal slice cultures have indicated repetitive mild blast-induced traumatic brain injuries lead to deficits in long-term potentiation, a cellular correlate to learning and memory. The trainee will assist in interrogating the mechanism of injury through various assays, including ELISAs and western blots. In particular, we will be looking at molecular pathways involved in inflammation and the progesterone pathway.

Location of Research:

On-Site

of hrs/week:

40

Department/Program:

Biomedical Engineering

Eligibility:

BS, Second Year, BS, Third Year, BS, Fourth Year, MS

To apply, please contact:

Carolyn Yijae Kim <cyk2119@columbia.edu>