Defense Announcement

Computational Analysis of Tissue Remodeling in the Rat Brain After Mild Traumatic Brain Injury

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Degree: **PhD, Electrical Engineering**

Date: 12/12/2017 Time: 12:00pm

Location: N325 - Eng. Building 1(ECE)

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Analysis of pathology in the brain at the cellular scale can yield rich insight into the tissue pathology effects of commonly used drug therapies for brain injury. We present methods to computationally reconstruct whole rat brains slices and analyze cell populations from 2D fluorescence microscopy images. The proposed methods are applied to a group of rats with mild traumatic brain injury and a profile of cell population alterations are presented.