

DEPARTMENT OF STATISTICS

Max Tischfield

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*Machine Learning applications for modeling neuropsychiatric disorders and injury in mice*

September 4, 2019

11:45pm – 12:45pm

Light refreshments will be served

110 Frelinghuysen Road

Hill Center, Room 552

Abstract: Machine learning is a powerful method to analyze and quantify mouse behaviors across many different paradigms, including neuropsychiatric disease and spinal cord injury. One of the most important challenges that neuroscientists face is how to properly analyze the data and apply the proper statistical methods. This seminar will highlight unique research programs at Rutgers that are implementing machine learning approaches to analyze motor behaviors in mice engineered to express human mutations found in Tourette Syndrome, and how mice recover motor movements following spinal cord injury. We hope that this seminar will foster interdepartmental collaborations on these topics.

Bio: Dr. Max Tischfield is an Assistant Professor in the Department of Cell Biology and Neuroscience at Rutgers. He obtained his Ph.D. from the Program in Neuroscience at Harvard Medical School and completed a post-doctoral fellowship in the Department of Molecular Biology and Genetics at Johns Hopkins Medical School. During this time, Dr. Tischfield discovered the genetic basis of several neurodevelopmental disorders and has broad experience modeling craniofacial, neurovascular, and neurodevelopmental disorders in mouse models. His lab, located at the Child Health Institute of New Jersey, continues to utilize mouse genetics in order to investigate the neuropathophysiology of Tourette Syndrome and blood and lymphatic vessel malformations in craniofacial disease models.

