

UNDERGRADUATES PURSUING RESEARCH IN SCIENCE AND ENGINEERING (UPRISE)

PSYCHIATRY AND BEHAVIORAL NEUROSCIENCE MEDICINE

SUMMER RESEARCH OPPORTUNITIES FOR UNDERGRADUATE WOMEN

APPLICATION DEADLINE: 03/01/2018

PROJECT TITLE: Neuroimmune systems in the neurobiology of affective disorders

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Project Description

The overarching aim of this research project is to examine molecular and cellular mechanisms by which neuroimmune systems contribute to the neurobiology of affective disorders. Experiments will utilize a mouse model of chronic stress to study neuroimmune functions in corticolimbic brain regions implicated in affective disorders. Further pharmacological or molecular interventions will be used to determine how stress-induced neurobiological responses contribute to pathophysiology underlying behavioral and cognitive deficits associated with affective disorders. The WISE student will be assigned to various aspects of this research project, such as carrying out chronic stress in mice, conducting behavioral and cognitive tests, collection of tissues for molecular and cellular assays, and data analyses. Students will be provided with training in research areas with which they are less familiar, as well as mentoring to support future endeavors in biomedical research.