

**BIOLOGICAL SCIENCES
COLLEGE OF ARTS AND SCIENCES****SUMMER RESEARCH OPPORTUNITIES FOR UNDERGRADUATE students****FOR APPLICATION YEAR: 2024****PROJECT TITLE: Sleep in mosquitoes**

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Project Description

Sleep-like states have been described in multiple insect systems, where these have been linked to immune functionality, stress tolerance, and reproductive aspects, but little is known about sleep-like states in mosquitoes. In this project, we will characterize this overlooked aspect of mosquito biology through combined behavioral and physiological studies, and follow this with sleep manipulation studies to determine impact of sleep deprivation on reproduction and host preferences. The information generated from this research will be critical to understand how periods of sleep-like states impact mosquito biology, potentially revealing targets of opportunity for mosquito control.