

DEPARTMENT OF BIOLOGY  
ARTS & SCIENCES

SUMMER RESEARCH OPPORTUNITIES FOR UNDERGRADUATE students

APPLICATION DEADLINE: 02/25/2022

PROJECT TITLE: Depth Perception Mechanisms in Hunting Spiders

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**Project Description**

Much like a camera, our retinas can only image in 2D-however we are still able to seamlessly perceive the world in 3D. We are not extraordinary in this sense. In fact, most visual animals perceive depth information by utilizing similar mechanisms. Hunting spiders, on the other hand, use a variety of unique mechanisms to gauge distances, making them a fascinating system to study. This project is aimed towards identifying the depth perception mechanisms available to various hunting spider families, and understanding how these mechanisms work based on optical principles. The students involved will take part in field collections, physiological measurements, behavioral experiments, and have the option to learn about computational scientific methods.