

**CASE WESTERN RESERVE UNIVERSITY
EAST CLEVELAND PUBLIC SCHOOL DISTRICT
PROVOST SCHOLARS
Intensive University Seminar
Session Two – Fall 2014
Thursday, October 9th, 2014, 2:30pm-5:00pm
Guilford House**

Exploring Biology

Purpose

In this University Seminar, the Provost Scholars will study how walking and flying insects use odors to guide them in their search for important resources, like food and mates. The Scholars will also investigate how insects and other animals use odor information to change their steering maneuvers and how humans can also attempt to follow odor trails. Dr. Mark Willis, an associate professor from the Department of Biology, will lead this lecture and provide the Scholars with a short hands-on demonstration.

Presenter Biography



Dr. Mark Willis is an associate professor in the Department of Biology at Case Western Reserve University. Dr. Willis has worked closely with his research assistant, Mr. Andrew Finnell, to study the olfactory orientation of turkey vulture orientations and the odor-tracking behaviors of the moth (*Manduca sexta*) and the cockroach (*Periplanta Americana*). One long-term goal of his research is to compare the behavior of the moth and cockroach to that of the turkey vultures. To learn more about Dr. Willis' research, please visit:

<http://www.case.edu/artsci/biol/willis/>

Objectives

Provost Scholars will

- (1) Explore how walking and flying insects use odors
- (2) Complete a hands-on demonstration to trace odors in their environment
- (3) Discuss the contributions of biological science to research and modern technology

Agenda

- Presentation
- The Provost Scholars will apply lecture concepts with a hands-on demonstration
- New Word of the Week

Faculty

- Dr. Faye Gary
- Coach Dennis Harris
- Katrice Williams, Master's Student, Program Manager
- Johnna Beversdorf, Student
- Step Up Undergraduate Tutors: Matthew and Alicia

Guest

- Dr. Mark Willis, Department of Biology at CWRU

Word of the Week: Morbidity and Mortality

Concierge and Matre'D

- Provost Scholars
Heavy hors d'oeuvres will be served