

DEPARTMENT OF ENTOMOLOGY ENTM250 Series Webinar



Speaker: Lyna Ngor Ph.D. Student Department of Entomology University of California, Riverside

Date: Monday, Oct. 25, 2021 Time: 4:00 pm - 4:50 pm Zoom: 948 0131 1028 Passcode: 347039

Title:

"Anthropogenic disruption of environmentally sourced symbionts"

Abstract:

Symbiosis is central to biodiversity, and biodiversity is essential for ecological health. While many symbionts are vertically transmitted, horizontal acquisition of symbionts from the environment is also common. Anthropogenic activity such as pollution alters natural environments ranging from humans, to bacteria, and to insects, which leads me to the questions of 1) <u>How does anthropogenic disturbance affect symbioses?</u>

2) <u>Are Emerging Concerns (CECs) driving the prevalence of these antibiotic</u> <u>resistant bacteria?</u>

Here, I will answer the questions by looking into antibiotic levels in soil in polluted and pristine areas, characterizing and quantifying floral and bee microbiome, and conduct in vitro exp. by manipulating exposure to field realistic CECs level in potted plants, quantifying antibiotic levels in pollen/ nectar, and characterizing/quantifying floral and bee's microbiome.