

## **UF/IFAS AI AND DATA SCIENCE SEMINAR SERIES**

**WEDNESDAY, FEBRUARY 19, 2025  
12:00P.M. - 01:00P.M.**

**ZOOM:**  
<https://go.ufl.edu/5g8w7ep>

### **Leveraging Bioinformatic Tools to Identify the Relationship Between Breastfeeding and Infant Carriage of Resistant ESKAPE Pathogens**

Antibiotic resistance is a major and growing public health challenge. Of particular concern are the ESKAPE pathogens, 6 organisms that can 'escape' antibiotics and lack effective treatment once antimicrobial resistance develops. Infants can carry higher levels of antimicrobial resistance genes than adults, which makes identifying the presence of ESKAPE pathogens in the infant gut microbiome of particular importance. New computational tools such as MGS2AMR have enabled the ability to study resistant organisms using metagenomic sequencing methods. These computational tools have enabled the identification of associations between infant feeding practices and the carriage of resistant ESKAPE pathogens in the gut microbiome.



**DR. DIANA TAFT**

---

### **BIO**

Dr. Diana Taft's research is focused on the development of the term infant gut microbiome, including leveraging bioinformatic tools to better understand the impact of breastfeeding on the infant gut resistome. She joined University of Florida as an Assistant Professor in Food Science and Human Nutrition in January 2022, after completing a post-doctoral research fellowship in microbiology with Dr. David Mills at University of California Davis and her PhD in epidemiology with Dr. Ardthye Morrow at University of Cincinnati.