

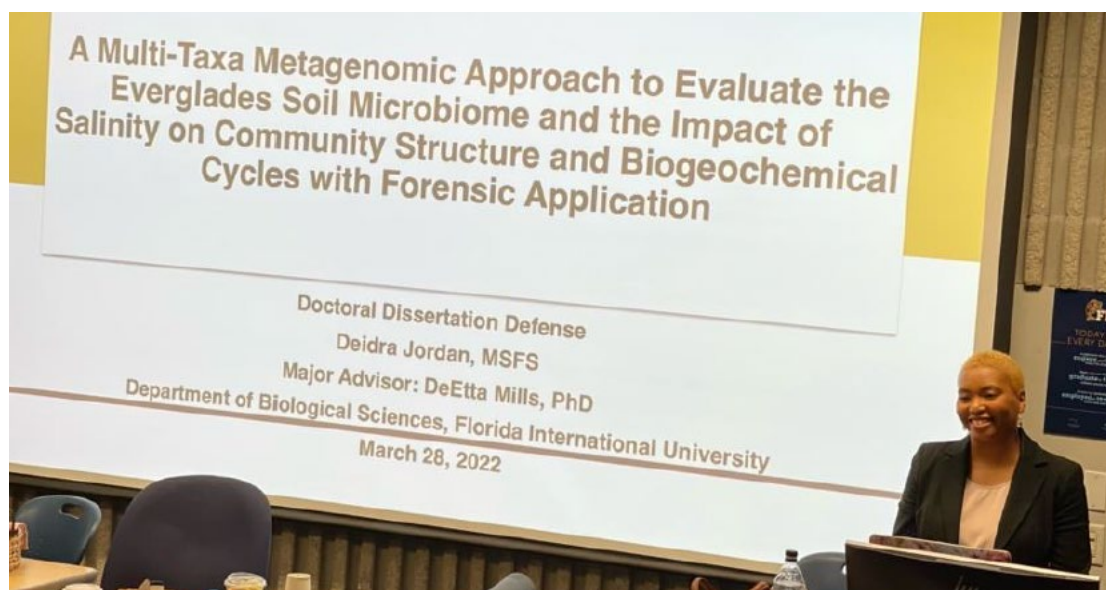
Student career funded by CARFS: Deidra Jordan

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The [Center for Advanced Research in Forensic Science](#), an NSF-funded Industry University Cooperative Research Center (IUCRC) at Florida International University, funded a research project called “Soil Provenance and Forensics Using Next Generation Techniques for Soil Metagenomic Profiling.” That project was the basis of my Ph.D. dissertation, “A multi-taxa metagenomic evaluation of the Everglades soil microbiome and the impact of salinity on community structure and biogeochemical cycles with a soil forensic application.” This research was performed in Dr. DeEtta Mills’ research group and utilized Next Generation Sequencing (NGS) to examine how the soil microbiome shifted over time after a disturbance, such as saltwater, was introduced into their environment. Additionally, bioinformatic analysis was performed to estimate the origin of soils using various taxa within the microbiome.

Through CARFS, I participated in the NSF Non-Academic Research Internships for Graduate Students (INTERN) Supplemental Funding Opportunity. This allowed me to obtain an internship at the FBI Laboratory in Quantico, VA. I spent a summer in their Counterterrorism and Forensic Science Research Unit (CFSRU), furthering my research skills by completing a separate research project and learning new techniques. The project I worked on involved evaluating different extraction and purification methods of mitochondrial DNA for NGS.

This opportunity allowed me to explore career options and gave me a sense of the type of career I would most enjoy. It also provided me with advanced skills in NGS sample quality control and library preparation methods, which prepared me for my next opportunity. Post-graduation, I secured a position as a Research Core Scientist at Harvard University.



Picture 1. Deidra Jordan presenting her dissertation research.

By: Deidra Jordan

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