**Andrea Mariel Gómez Cabrera**

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Raleigh, NC

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Pronouns: She, Her, Hers

**RESEARCH INTERESTS**

My research encompasses microbial population dynamics and to investigate the biology, ecology and evolutions of plant associated bacteria in the context of niche specification and competition.

**RESEARCH AND PROFESSIONAL EXPERIENCE**

**2021- 2023 Present graduated student research assistant in the Department of Entomology and Plant Pathology at North Carolina State University.**

* Administered study on Rhs toxin abundance, diversity, and Function in gram negative bacteria.
* Performed disease diagnostics of soft rotting bacteria in sweetpotato.
* Independently performed DNA extraction and PCR to characterize specific genome regions on strain CIP417 of *Ralstonia solanacearum.*
* Conducted regular lab maintenance including making media, properly discarding biohazards, cleaning dishware, stocking and updating bacterial strains data in -80 freezer.
* Proficient in bioinformatic analysis, sequence annotation, alignment, and phylogenetic tree generation.
* Engaged in weekly plant pathology scientific seminars.
* Mentor and trained undergrad students.
* Seminar chair of the Plant Pathology Graduate Student Association.
* Vice-President of the Plant Pathology Graduate Student Association.
* President of the Plant Pathology Graduate Student Association.

**2020 Internship at James Brown Pharmacy in Ecuador.**

* Conducted data management and administration of laboratory materials.
* Performed Ovum-picked up technique, in vitro feralization and embryo transfer in dairy and dual-purpose cattle.
* Trained in animal handling and welfare.

**2020 Undergraduate Internship in the Department of Poultry Sciences at North Carolina**

**State University**.

* Conducted horizontal disease transmission trial on the infection of *Histomonas meleagridis* in turkeys for Cargill, this included participation in design, poultry farming, disease assessment and data analysis.
* Disease detection with PCR diagnostics for *H. meleagridis, Cochlosoma anatis and Heterakis gallinarum.*
* Performed animal welfare, blood samples and processing trainings.

**2017-2020 Teaching assistant at Universidad Zamorano.**

**Meat Processing Plant**

* Supervisor of student safety, quality assessment, product dispatch, and coordination of tasks for junior students working at the processing plant
* Performed educational talks about meat production and processing.

**Plant pathology lab**

* Supervisor of student safety and conduction of experiments.
* Conducted regular lab maintenance including media, properly discarding biohazards and cleaning dishware.
* Performed educational lectures about fungal diseases.

**Managed programs:** Word, Excel, Power Point, Artemis, Rstudio, Prokka, OrthoMCL, Figtree, Seaview, MegaX, Geneious and terminal command lines.