

Madison Cooper

Tampa, FL | (321)432-7107 | mcooper9@usf.edu

Education

Doctor of Philosophy in BioMedical Sciences (Expected Graduation ~2029) Morsani College of Medicine, USF Health, Tampa, FL

Bachelor of Science in Microbiology (2020-2024) – GPA: 3.67 Department of Molecular Biosciences, University of South Florida, Tampa, FL

Cocoa Beach Jr / Sr High School (2016-2020) Honor Graduate

Relevant Coursework

General Microbiology with lab

General Genetics

Cell Metabolism

Medical Bacteriology with lab

Parasitology

Emerging Infectious Diseases

Cell Biology with lab

General Biochemistry

Molecular Microbiology

Virology

Public Health/Pathology

Skills and Proficiencies

Biosafety training

CPR certification

Microsoft certification - Office Suite

Project management

Protocol development

Data analysis

Creating scientific images (BioRender)

Bacterial growth media preparation

Antibiotic stock preparation

Interbacterial competition assays

Serial dilution and spot titer analysis

Chromosomal DNA extraction

Plasmid DNA preparation

Polymerase chain reaction

Agarose gel electrophoresis

Bacterial two-hybrid assay

Research Experience

March 2023 – August 2024

Undergraduate Researcher

20 hrs/week

PI: Dr. Prahathees Eswara, Department of Molecular Biosciences, University of South Florida

- Preparation of various media for experimental use
- Present current microbiology research papers in weekly meetings
- Lead a project to investigate the bacteria-bacteria interactions of *Bacillus subtilis* and *Staphylococcus aureus*
- Carry out bacterial competition assays
- Measure optical density of culture and perform culture dilutions
- Conduct spot titer analysis
- Perform bacterial cloning (PCR, restriction digestions, ligations)
- Run agarose gels following cloning steps
- Execute *Escherichia coli* DH5a transformations

Presentations

October 2023 – Florida Branch Meeting of the American Society for Microbiology – St. Augustine, FL **Madison Cooper**, Kelly Resendes, and Prahathees Eswara. Inhibition of *Staphylococcus aureus* utilizing *Bacillus subtilis* lipopeptides. (Poster)

Awards and Distinctions

USF Cum Laude Graduate

- Spring 2024

USF Microbiology Student Excellence Award

- Spring 2024

USF Gold Scholars Award

- Awarded for the Fall and Spring semesters of 2020-2024

FL Academic Scholars Award

- Awarded for the Fall and Spring semesters of 2020-2024

Vice President of Dean's Student Leadership Society Standards Committee

- In position for Fall 2023 and Spring 2024

Member of National Society of Leadership and Success

- Member since June 2022

Member of USF Student Government

- January 2022 – May 2024

Work Experience

August 2018 – Present *Server*

Florida's Seafood Bar and Grill

- Payment processing including checks, cash, credit, or debit
- Greet and show customers to their tables
- Serve customers in a kind and helpful way to ensure satisfaction
- Answer phones to take “to-go” orders and the “call-aheads”
- Prepare food and drinks
- Successfully solved customer conflict when needed

August 2018 – Present *Office Assistant*

Taylor and Lockard, CPA

- Answer phones and book appropriate appointments
- Scan, file, and process tax returns
- Enter time sheets into billing software

August 2018 – Present *Church Fall Festival Volunteer*

Church of Our Saviour Catholic Church

- Assist in finance department for annual church fall festival
- Volunteer with the Teen Ministry Booth when needed

July 2023 – Present *Animal Caretaker*

Rover

- Interact with clients and offer services based on needs
- Partake in “drop-in” visits with dogs and cats of various breeds and sizes
- Partake in dog walking
- Assist in training, oral and injection medication administration, and daily exercise of animals

Other Experiences/Extracurriculars

January 2022 – August 2022 *Clinical Nurse Assistant*

130 hrs

Galloway Orthopedics

- Announce patient names and bring patients back to their rooms
- Take blood pressure, temperature, and O2 levels of patients
- Articulate with patient on reason for visit with documentation
- Addition and organization of patient files
- Assist and professionally discuss and evaluation of patient conditions

January 2022 – August 2022 *Oncology Surgeon Shadowing*

30 hrs

St. Anthony's Hospital

- Shadow oncology surgeon in the operating room while operation is in progress
- Learn the sterilization process in the OR
- Partake in viewing of patient X-rays and evaluation
- Observe lumpectomies, mastectomies, and other surgeries
- Attend clinic appointments with patients, observe evaluations given by surgeon
- Attend hospital room visits with recent surgery patients, evaluate and offer assistance as needed

August 2018 – May 2020

Captain of Varsity Volleyball Team, Cocoa Beach Jr/Sr High School

August 2017 – May 2020

Captain of Travel Volleyball Team, Volley Tech Academy

August 2016 – May 2018

Captain of Varsity Track & Field Team, Cocoa Beach Jr/Sr High School