# **DSU WiCCED Summer Scholars - Marshgrass**

<u>Dates of internship</u>: June 3<sup>rd</sup>, 2019 – July 25<sup>th</sup>, 2019 <u>Location</u>: Delaware State University, 1200 N. DuPont Hwy, Dover, DE 19901 <u>Number of positions available</u>: 1-3

<u>Faculty Mentor</u>: Venu Kalavacharla <u>Professional Staff Mentors</u>: Antonette Todd, Mayavan Subramani

## Project Topic: Marshgrass

## **Research Description:**

Current research opportunities will focus on abiotic stresses associated with sodium and nutrient uptake in marsh grass. Our goal is to understand underlying mechanisms which allow marsh grasses to withstand high levels of sodium and other nutrients in Delaware Inland bays. Undergraduate students will have the chance to work on a novel project which will include sample collection of marsh grass, DNA, RNA, and protein isolation, along with possible data mining. As marsh grass is one of the newest plant species our lab is investigating, students will be a part of discoveries which will add to intellectual and scientific merit of this study.

## **Student Learning Objectives: Professional and Research Skills**

This internship focuses on the development of the following professional and scientific skills.

Broad Professional Skills	Specific Skills
Planning and time management	Ability to set and complete specific goals of varying scope
Work independently	Independent work ethic - work independently to problem-solve
Collaborative skills	Learning to complete tasks efficiently and effectively with others
Express ideas in writing and verbally	Communicate with diverse audiences - Development of impactful poster and oral presentations. Honing ability to deliver scientific results/impacts to people of interdisciplinary background.

#### **Prerequisites:**

At least a Sophomore (or Freshman with equivalent lab experience); An interest in molecular genetics or biology.

# Work Environment and Expectations:

<u>Laboratory environment</u>: Ag Annex Building, Rm 217. Hours are flexibly determined between student and mentor. Students will work part time during the fall and spring semesters, and full time during Summer Session. Students will also participate in a retreat, communications workshop and end of internship summer symposium.

#### Stipend:

\$5,000 total; \$2,500 will be paid on 6/28/19 and the final \$2,500 will be paid on 7/25/19 pending final poster completion. Both payments will be delivered via a paper check.

# Funding Source:

National Science Foundation, Delaware EPSCoR Track I

**How to apply:** <u>https://ciber.desu.edu/opportunities/</u> or contact Ms. Tiffini Johnson at <u>trjohnson@desu.edu</u> with subject line: WICCED