

## **CSET Good News Report May 2025**

### **1. Department of Biology**

**Dr. Suresh Subedi**, Assistant Professor of Biology, and his NSU students, **Sherwood Epps, Nilah Ankrah, and Shivish Bhandari** have published a research article in the Journal of Environmental Management (JEM)—a leading peer-reviewed journal with an impact factor of 8.0. This impactful study was the result of the 2024 Summer Research Program sponsored by the College of Science, Engineering, and Technology (CSET) at Norfolk State University. The research explored whether native microbes can help plants cope with salinity stress—a growing concern due to climate change and sea level rise—and investigated how these microbes might be used to enhance plant resilience in natural environments. The findings provide compelling evidence that native microbial communities can significantly improve plant tolerance to salinity. These microbes show promise as bioinoculants for restoring or maintaining plant health in salt-affected areas, especially around the Chesapeake Bay, where soil salinization is an increasing threat. The article is now available online and can be accessed through the following links:

<https://authors.elsevier.com/a/1l6Yn14Z6twgmx>

<https://doi.org/10.1016/j.jenvman.2025.125841>

### **2. Department of Engineering**

**Dr. Adem Ibrahim**, Professor, Department of Engineering, has received a summer faculty fellowship position with the NAVSEA-Dahlgren facility. Dr Ibrahim will implement a modeling study, High Energy Laser (HEL) Weapon Modeling and Optimization. Dr. Ibrahim will investigate requirements needed to high intensity/irradiance pulsed laser signals based on resonance conditions in the laser cavity. The program will also provide opportunities for student internships as a follow-on activity.

**Dr. Ivy Jones**, Department of Engineering, has been selected to participate in the Historically Black Colleges and Minority Serving Institutions (HBCU-MSI) Faculty Fellow Summer Program sponsored by the U.S. Department of Defense (DoD). Dr. Jones will be placed with the Materials Research Institute at Pennsylvania State University, University Park, PA. This HBCU-MSI program aligns under the domain of the DEVCOM Army Research Laboratory (ARL) Research Associateship Program (RAP), which is administered by Oak Ridge Associated Universities (ORAU).