

VOORHEES UNIVERSITY NEWS OFFICE OF SPONSORED RESEARCH

FALL 2023 HIGHLIGHTS

ABOUT OSR...

The Office of Sponsored Research (OSR) is a department under the Office of the Provost/Division of Academic Affairs. This office is charged with the responsibility of providing support to all faculty, staff, students, administrative offices and/or departments (individually or collectively) in seeking and applying for external funding. Research endeavors that seek to enhance student activities, improve collegiate programs and services, and positively impact the greater community can be supported through grants, contracts, cooperative agreements, sponsorships, donations or a host of other mechanisms. To assist the members of the College in successfully navigating these streams of resources, the OSR is implementing a streamlined process for all grant applications submitted on behalf of Voorhees University.



Esther Brown

For more information, visit: <https://voorhees.edu/division-of-academic-affairs/sponsored-research/>

**Esther Brown, Director of Sponsored Research | (803) 780-1158 |
Ebrown1@Voorhees.Edu**

VOORHEES UNIVERSITY ASSISTANT PROFESSOR AND YES I CAN ORGANIZATION RECEIVE A \$10,000 GRANT



Dr. Marcus Amos

Dr. Marcus Amos - Voorhees University Assistant Professor of Sports Management, Dr. Marcus Amos and Yes I Can, Inc. have been awarded a **\$10,000** grant from Hikma Pharmaceutical USA Inc. to support a partnership with the Yes I Can Organization, to provide essential outreach prevention education initiatives related to the Opioid/Fentanyl Crisis.

Dr. Amos expressed his excitement about the opportunity to work with Yes I Can Inc. with the goal of educating as many individuals as possible. "It is imperative that we remain diligent in our prevention education efforts within the community particularly in light of the illicit and illegally manufactured Fentanyl crisis," states Amos. He also recognizes those who helped make this possible and continues to say, "I would like to thank Mr. Josh Jones, National Director for Government and Cultural Alliances at Velocity BIOGROUP, who introduced us to the grant recipient opportunity with Hikma

Pharmaceutical USA Inc., with assistance from Dr. Desiree Crevecoeur-MacPhail, Medical and Scientific Advisor for Hikma Community Health."

In addition to his role as Assistant Professor of Sports Management at Voorhees University, Dr. Amos also serves as the Faculty Athletic Representative and actively contributes to Student-Athlete Development services. His array of credentials includes being a licensed substance abuse associate, a certified alcohol & drug counselor, and international advanced drug & alcohol counselor. His twenty years of unwavering commitment to the well-being of the community, as well as amateur and professional athletes, has seen him serve as a facilitator, counselor, and educator, specializing in raising awareness about high-risk behaviors associated with Opioid misuse and abuse. The Voorhees University 2023 Faculty of the Year's contributions have earned him a well-deserved place as an inaugural member of the Opioid Project National Leadership Consortium Committee.

Yes I Can, Inc., is a purpose-driven nonprofit organization, founded by Art Moore, a former NFL Player for the New England Patriots, and his wife, Gail Moore, a contemporary Christian recording artist. It is dedicated to bringing a message of hope to youth and families in crisis.



Dr. Prince Brown

HAVEN SOLAR-POWERED SHELTER

Dr. Prince Brown - Voorhees University received a grant from the South Carolina Office of Regulatory Staff in the amount of **\$10,000** to install a "Haven Solar-Powered Shelter" on our campus. Voorhees University requested funding from the Energy Office's Competitive Demonstration Project Mini-Grant to procure and deploy a solar-powered shelter on the Voorhees University campus in Denmark, South Carolina (481 Porter Dr). The solar-powered shelter will be the first project of its kind deployed on Voorhees' campus and will serve as a demonstration project to test broader implementation of solar projects at other locations in the region. The solar-generating shelter will allow students and staff the ability to enjoy a reprieve from the sun while collaborating or studying independently. Users will be able to charge and use laptops and cellphones while waiting for a shuttle ride or a rideshare pick up. In addition to the shelter, Voorhees plans to install bicycle racks adjacent to the solar-powered shelter to provide secure parking for bicyclists on campus. This will be the first bicycle rack installed on Voorhees University's campus and with its installation it will provide

an alternative form of transportation that was previously underutilized for students, faculty, staff, and visitors. The proposed project is a partnership between Voorhees University, CORE SC, and The Ray.

THE VOORHEES RURAL COMMUNITY INSTITUTE

Dr. Katherine Whitaker and Alicia Davis - The Voorhees Rural Community Institute received a USDA Rural Development Rural Business Development Grant in the amount of **\$120,000** to enhance the Voorhees University Rural Community Institute by providing training, technical assistance, and support for the creation of individualized feasibility and planning, economic development strategies, and partnerships for rural business development. The Voorhees Rural Community Institute serves as a hub for rural development, providing training, support, and resources to help businesses and communities thrive. Ultimately, this will lead to increased economic growth, job creation, and improved quality of life for those in the Voorhees rural community. Their primary objective is to serve as a rural hub for the region, linking project planning and training, business improvement, and community economic development with a focus on the rural areas of Bamberg, Allendale, and Barnwell Counties. The team will provide training and technical assistance to community members, businesses, and organizations to help them develop feasibility and planning strategies. This will include training in business planning, market analysis, and financial forecasting. They will also work with local partners, including businesses, community organizations, and government agencies, to establish partnerships designed to produce learning environments, leadership and entrepreneurship mentoring, and community economic development. Lastly, the hub will provide support and assistance in evaluating the economic and community impact of rural business development initiatives. This will include conducting market research, monitoring business growth and development, and evaluating the effectiveness of different strategies.



Dr. Katherine Whitaker



Alicia Davis

STUDY OF POTENTIAL ANTI-MICROBIAL EFFECT OF *CALENDULA OFFICINALIS* ON MULTI DRUG RESISTANT BACTERIAL STRAINS

Dr. Zhabiz Golkar - Voorhees University has won a Department of Commerce Grant for **\$130,000** to investigate the potential anti-microbial effect of *Calendula officinalis* on multi drug resistant bacterial strains. For this, the antimicrobial effects of the extracts obtained using ethanolic extracts will be tested on drug resistant bacterial strains available in the lab. Further analysis will be done using high-performance liquid chromatography to fractionize the flavonoid components. This data will be used to determine different concentrations (doses) on respective bacterial strains followed by MIC (Minimal Inhabitation Concentrations) methods.



Dr. Zhabiz Golkar

“GROW UP” SUSTAINABLE FARMING PRACTICES - WORKFORCE DEVELOPMENT ON VERTICAL FARMING AND ORGANIC AGRICULTURE

Dr. Zhabiz Golkar – Voorhees University has won **\$380,000** from the National Science Foundation to train individuals in the use of vertical farming techniques as a sustainable solution for socioeconomically challenged agriculture areas. By utilizing vertical space both inside and outside, the training curriculum will include topics in maximizing crop yields while minimizing land usage, water consumption, and reduction of environmental impacts. The curriculum focuses on implementation of efficient vertical farming systems that integrate advanced technologies, such as hydroponic, aeroponic, and aquaponic systems as well as incorporating natural and artificial LED lighting, to provide optimal growing conditions for a variety of specialized crops. Additionally, the training will provide economic viability and scalability of vertical farming, assessing its potential to address food security challenges in socioeconomically challenged areas and reduce the carbon footprint associated with traditional agriculture. Through this program, the goal is to contribute to the advancement of economically viable and sustainable farming practices that can be implemented in schools, homes, and community assistance institutions, as well as revolutionizing food production and fostering a more resilient and environmentally conscious future for the disadvantaged.

THE FITNESS COURT PROJECT

Dr. Calvin Williams - Voorhees University has been selected for a grant of **\$30,000** toward the fitness court project. “As Voorhees University continues to embark upon President Ronnie Hopkins’ vision of, “The Next Level of Excellence” VU is pleased to announce the collaboration of the Divisions of Student and Academic Affairs to secure a grant award that will assist in the development of facilities to address local health and fitness disparities. Upon the recommendation of Vice President of Student Affairs/Athletics Director Charlene Johnson, the Voorhees University Sports Management department housed in the School of Business and Entrepreneurship and a part of the Division of Academic Affairs pursued the National Fitness Campaign (NFC) grant in the Fall of 2023. NFC is a consulting firm that develops partnerships with various entities to fund, construct and generate outdoor courts that make fitness free and accessible as a solution to the growing health crisis of sedentary lifestyles in many communities. After applying for the grant award, Dr. Calvin T. Williams Jr, Assistant Professor and Program Coordinator for Sports Management was informed in early November that Voorhees University had been selected for a grant of \$30,000 toward the fitness court project. The project contingent upon matching funding would break ground in late spring 2024 and be completed in the Fall. “



Dr. Calvin Williams

VOORHEES UNIVERSITY: HBCU HEALTH DISCOVERY GRANT

Dr. Cathy Scarborough, Dr. Kendall Williams, Tiffany Grayson, and Nurse Suzanne Williams - The Voorhees University Rural Health Team won a University of South Carolina HBCU Health Discovery Grant. Their proposal titled, “ Voorhees University: HBCU Health Discovery Grant,” was approved for funding in the amount of **\$500,000** over two years (\$250,000/year). Voorhees University will use the funds for its Rural Community Development Institute (RCDI) to address the healthcare disparities in our underserved communities through outreach, education, and advocacy for increased healthcare access.



Dr. Cathy Scarborough



Dr. Kendall Williams



Tiffany Grayson



Nurse Suzanne Williams

THE REAP: REWARDING EDUCATOR ACHIEVEMENT AND PERFORMANCE GRANT

The U.S. Department of Education has awarded the Voorhees Center of Excellence for Educator Preparation and Innovation (EPI Center) a new Teacher and School Leader (TSL) Incentive Program grant to improve student achievement in two South Carolina counties. The REAP: Rewarding Educator Achievement and Performance grant aims to improve the quality of education, elevate educator effectiveness, raise student achievement, and increase equity in learning in Fairfield County School District and Georgetown County School District.

Dr. Damara Hightower Mitchell, Provost and Vice President for Academic Affairs and Executive Director of the EPI Center says the **\$26,700,000** grant will serve more than 850 teachers and nearly 11,000 students enrolled in 26 schools across both districts.



*Alisha Truesdale Cotton
Dr. Damara Hightower Mitchell
Dr. Tondaleya Green Jackson*

“Through our collaboration with Fairfield and Georgetown, we will implement two tiers of service. The first tier will utilize a comprehensive, data-driven, Human Capital Management System to attract, retain, and reward educator effectiveness. The second tier will provide resources and will support the continued professional growth of teachers and leaders in our partner school districts,” said Dr. Hightower Mitchell.

The two tiers of service address talent management, modeling a high-quality evaluation plan, performance-based compensation, professional growth tracks, development of a principal network, instructional coaches for new teachers and career ladders.

According to Dr. Tondaleya Green Jackson, Voorhees University Professor and Director of the EPI Center, REAP will bring resources to Fairfield and Georgetown, to help expand upon existing student improvement efforts. “We believe by providing the necessary support and utilizing validated tools to assess educator effectiveness, we can increase student attainment of state academic performance standards, help close the achievement gap, and improve equity,” said Dr. Green Jackson.

Dr. Ronnie Hopkins, President and CEO of Voorhees University, commissioned the establishment of the EPI Center out of his commitment to addressing issues of educational equity and access in rural areas. The Center of Excellence for Educator Preparation and Innovation is a national nonprofit founded specifically to address teacher shortages and diversify the teacher workforce. It provides innovative pathways and professional learning opportunities for currently certified teachers and those seeking certification. Voorhees University is the only Historically Black College or University in South Carolina doing this concentration of work in teacher preparation.

ARTIFICIAL INTELLIGENCE, CYBER SECURITY AND ENVIRONMENTAL SCIENCE (ACE)



Dr. Corey Amaker

Dr. Corey Amaker and Dr. Zhabiz Golkar - Congratulations to Dr. Amaker, Dr. Golkar and Voorhees University, as recipients of a US Department of Energy (DOE) funding award of **\$1,300,000** that will assist Voorhees University in designing a comprehensive, seamless pipeline and career pathways program for students with a targeted focus on Artificial Intelligence, Cyber Security and Environmental Science (ACE).

The program will enable students to obtain the skills, credentials, and competencies for high demand jobs in STEM areas. The funding will: (1) support the acquisition of equipment to augment workforce readiness in state-of-the art laboratories, (2) help attract students by further enhancing their workforce capacities through research, work-based learning and scholarship opportunities, and (3) provide professional development for faculty, staff, and community constituents.

Funding will also support the enhancement of the curriculum with the development of new courses and lab teaching materials that will impact the development of analytical skills in environmental science, cybersecurity and artificial intelligence. Curriculum and laboratory enhancement will provide excellent in-house, hands-on opportunities for the University students to

work on advanced analytical platforms and front-end research areas. The experiences and training received will provide a seamless transition to their next career levels in STEM disciplines.

DEVELOPING PATHWAY TO PU MODERNIZATION CAREERS AT VOORHEES UNIVERSITY: A HIGHER EDUCATION WORKFORCE DEVELOPMENT PROGRAM PARTNERSHIP WITH SAVANNAH RIVER SITE

Dr. Gwenda Greene and Dr. Zhabiz Golkar - Congratulations to Dr. Greene and Dr. Golkar. Because of their hard work, time and effort as grant writers, Savannah River Nuclear Solutions awarded Voorhees University **\$1,200,000** over a multi-year period, (2022-2025). This funding opportunity will help Voorhees University design a comprehensive, seamless pipeline and career pathways program for students with a targeted focus on Cyber Security and Business for the Plutonium Modernization Program (PuMP). Both Business Services and Cyber Security are identified as critical skill areas for the National Nuclear Security Administration (NNSA). Voorhees University is committed to ensuring that skill gaps affecting the NNSA mission are addressed through proper training, qualifying, and certifying. The proposed program will enable students to obtain the skills and credentials most needed by regional and national nuclear programs, providing NNSA with an opportunity to attract skilled employees needed in the cyber security and business services environment. The program's emphasis on providing opportunities for HBCU students also serves to forge a new pipeline leading to qualified workers that support the established nuclear workforce demand. This project will serve to recruit, train, and develop students to work in roles to support the business services and cyber security areas of the PuMP.



Dr. Gwenda R. Greene



The Next Level of Excellence!