



## Office of University Programs (OUP) Minority Serving Institutions (MSI) Program

The Office of University Programs (OUP) Minority Serving Institutions (MSI) Program provides opportunities that foster and cultivate a diverse university-based research capability and talented workforce and prepares motivated students to launch successful homeland security-related careers. MSI Program offerings are designed to:

- ✓ Advance the research capabilities of students and faculty that contribute to MSI capacity building,
- ✓ Cultivate scientific leadership in areas of study critical to homeland security,
- ✓ Recruit and diversify the next generation of the Homeland Security Workforce, and
- ✓ Provide opportunities for students and junior faculty to directly engage with professionals in their areas of interest.



### Scientific Leadership Award (SLA)

Grants up to \$1M are competitively awarded to MSIs to help build institutional capacity through research and collaboration. Grants enable awardees to establish homeland security-related curricula and/or courses of study while supporting the development of student mentorship and recruitment activities, science and engineering research, and teaching initiatives. These awards significantly contribute to the development of and cultivation of relationships and networks across private industry, university, federal and local government, and DHS Centers of Excellence (COE). *(Next anticipated releases in spring 2024 and 2026. Available to faculty).*

Border protection is inherently dangerous for those on the front lines. To help ensure the safety of those charged with protecting U.S. borders, the **Scientific Leadership Award (SLA)** research team at the University of Texas Rio Grande Valley developed a system of wheeled ground robots and flying drones capable of working together to search, patrol, and detect threats. These cutting-edge vehicles are autonomous and incorporate the latest advances in machine learning and computer vision to maximize their adaptability which allows them to intelligently navigate challenges without human operators having to constantly oversee and intervene. In addition to being a game-changer on the front lines, this project also advanced research, resulting in five publications and conference presentations, four student graduations, and helped students in the Rio Grande Valley secure jobs in the security and defense fields.



### Homeland Security Workforce Opportunities to Increase Research Engagement and Diversity (HS-WIRED)

An 8-12-week internship program for graduate and undergraduate MSI students interested in supporting cutting-edge research with leading scientists and engineers. Participants conduct research at Pacific Northwest National Laboratory (PNNL), providing an opportunity to establish connections with Department of Energy professionals working on homeland security-related research. *(Applications accepted November – March. Stipend, housing, and transportation provided).*

## Current MSI Partners

Arizona State University  
Bethune-Cookman University  
Bowie State University  
California State University Dominguez Hills  
California State University Northridge  
California State University San Marcos  
City University of New York  
CUNY/Baruch College  
CUNY/John Jay College of Criminal Justice  
CUNY/New York City College of Technology  
Diné College  
Eastern New Mexico University  
Elizabeth City State University  
Fayetteville State University  
Florida International University  
Georgia State University  
Illisagvik College  
Jackson State University  
Johnson C. Smith University  
Lincoln University  
Mercy College  
Morgan State University  
Norfolk State University  
North Carolina Agricultural  
and Technical State University  
North Carolina Central University  
Prairie View A&M University  
San Jacinto College  
Southern University and A&M College  
St. Mary's University  
Sul Ross State University  
Tennessee State University  
Texas A&M University - College Station  
Texas A&M University - Corpus Christi  
Texas A&M University - Kingsville  
Texas State University  
Texas Southern University  
Texas Tech University  
Trinity Washington University  
Tougaloo College  
University of Alaska Anchorage  
University of Alaska Fairbanks  
University of Alaska Northwest Campus  
University of Baltimore  
University of California - Davis  
University of California - Irvine  
University of Central Florida  
University of the District of Columbia  
University of Houston  
University of Nevada Las Vegas  
University of New Mexico  
University of North Texas  
University of Puerto Rico at Mayaguez  
University of Texas at Arlington  
University of Texas Austin  
University of Texas El Paso  
University of Texas Rio Grande Valley  
University of Texas San Antonio  
Virginia Commonwealth University  
Virginia Tech



# Science and Technology



## Summer Research Team Program (SRT)

A team of early career faculty and up to two students are paired with a DHS COE to conduct full-time collaborative summer research at one of 10 DHS COEs. Over the course of 10 weeks during the summer, this opportunity increases and enhances scientific leadership at MSIs in research areas that support the mission and goals of DHS. Upon successful completion of the summer session, teams are eligible to receive up to \$100k of follow-on funding to continue their research for an additional year. *(Applications accepted September – December. Available to faculty, graduate, and undergraduate students. Stipend, housing, and transportation provided).*

Cross-Border Threat Screening and Supply Chain Defense (CBTS), a DHS COE led by Texas A&M, supported a **Summer Research Team (SRT)** effort to detect harmful chemicals in shrimp supplies. Dr. Harshica Fernando and her students used gas-chromatography, an analytical technique used to separate, detect, and quantify chemical components of a given sample, to detect polycyclic aromatic hydrocarbons in shrimp. This SRT opportunity has substantially contributed to both science and student development: the findings will help ensure the integrity of shrimp imports – the most popular seafood in the U.S. – while training a new generation of skilled researchers.



## Minority Serving Institutions (MSI) STEM Research and Development Consortium (MSRDC)

A funding pathway that enables DHS HQ and Components to directly access member MSIs. The MSI must serve as the prime performer for research, development, test, and/or evaluation efforts. Through MSRDC, DHS can access more than 80 MSIs, including 15 R1 universities, and 37 partnering private industry organizations. *(Accepting applications on an ongoing basis).*