FY 2018 DoD HBCU/MI Research and Education Program
Award Recipients

Institution	Principal Investigator	Proposal Title	ST	Service	Minority Desig.
Alabama A&M University	Yuan, Qunying	Biological Synthesis of Nanoparticles for the Application of Bioengineering and Biotechnology in Army	AL	ARO	HBCU
Alabama State University	Dean, Derrick	Lightweight Multifunctional Advanced Materials	AL	AFOSR	HBCU
Benedict College	Qin, Changyong	Novel Silicon/Graphene Nano-Composites for Lithium-Ion Battery: Green Fabrication, Device Performance and Electrochemical Mechanism	SC	ARO	HBCU
Bowie State University	Ji, Soo-Yeon	Designing an Interactive Web-based Visualization System to Analyze Network Behaviors using Cloud Computing	MD	ARO	HBCU
California State University-Los Angeles	Liu, Yangyang	Multifunctional Metal-Organic Frameworks for Efficient Degradation of Chemical Warfare Agents: Mechanism and Synthesis	CA	ARO	MSI
California State University-Northridge	Lu, Gang	Towards Computational Design of High-Efficiency Non-Fullerene Organic Photovoltaics	CA	ONR	MSI
Clark Atlanta University	Williams, Michael	Integrated Study of Emerging 2D Materials and Interfaces	GA	ARO	HBCU
CUNY-New York City College of Technology	Kezerashvili, Roman	Emerging Two Dimensional Van Der Waals Materials for Optical Information Transfer and Processing	NY	ARO	MSI
Delaware State University	Radu, Daniela	Compositional Programming of Group IV Semiconductor Nanomaterials Toward Rationally-Designed Optoelectronic Properties	DE	ONR	HBCU
Delaware State University	Rana, Mukti	Sensors and Infra-red Materials for Photodetection (SIMPLe)	DE	ARO	HBCU
Fayetteville State University	Luo, Zhiping	Radiation Response of Nanoscintillators Using a Cathodoluminescence Spectrometer on an Electron Probe Microanalyzer	NC	ARO	HBCU
Florida A&M University	Kumar, Rajan	A Comprehensive Study of Forebody Vortex Interactions with Control Surfaces of Generic Axisymmetric Configurations	FL	ARO	HBCU
Florida Atlantic University	Nojoumian, Mehrdad	New Reputation-Based Mining Paradigm: Incentivizing Blockchain Miners to Avoid Dishonest Mining Strategies	FL	AFOSR	MSI
Fort Valley State University	Zeng, Xiangyan	Infrared-to-Visible Face Recognition Using Sparse Learning Systems	GA	ARO	HBCU
Hampton University	Hommerich, Uwe	Development of Lead Halide Perovskites for Optoelectronic Applications	VA	ARO	HBCU
Howard University	Allen, Anna	Enhancing Research in the STEM Disciplines at Howard University by Investigating Novel Regulation of the 26S proteasome	DC	ARO	HBCU
Jackson State University	Hossain, Alamgir	Supramolecular Recognition and Sensing of Hazardous Anionic Contaminants with Urea and Thiourea Based Synthetic Receptors	MS	ARO	HBCU
New Mexico State University	Stochaj, Steven	Enhancing Research in the Solar-Terrestrial Environment at New Mexico State University	NM	AFOSR	MSI
Norfolk State University	Noginov, Mikhail	Control of Organic Matter with Strong Coupling	VA	AFOSR	HBCU

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North Carolina A&T State University	Gloster, Jr., Clay	A Mobile High Performance Computing System for Deployment in the Field	NC	ARO	HBCU
North Carolina A&T State University	Iyer, Shanthi	Study of PIN Junctions in GaAsSb Nanowires on Si for the Next Generation Infrared Photodetectors	NC	AFOSR	HBCU
Nova Southeastern University	Smith, Robert	Using periodic spatial disturbance to manipulate cooperation in bacteria.	FL	ARO	MSI
Oakwood University	Patel, Darayas	Nanocolloid Laser With Parity-Time Symmetry	AL	ARO	HBCU
Rutgers, The State University	Slater, Lee	DOD MI Research and Education program	NJ	ARO	MSI
San Diego State University Foundation	Youssef, George	In-situ Characterization of the Dynamic Behavior of Impact Mitigating Polymers	CA	ONR	MSI
San Francisco State University	Newaz, Akm	Optical and Optoelectrical Properties of Franckeite: A Naturally Occurring Van Der Waals Heterostructure	CA	AFOSR	MSI
San Jose State University	Wolcott, Abraham	Fundamental Surface Science of Nanoscale Diamond and Their Interaction with Biological Surfaces	CA	ARO	MSI
Savannah State University	Kaltenberg, Amanda	Marine Mammal Associations with Environmental and Prey Variability of Cape Hatteras	GA	ONR	HBCU
Savannah State University	Nitta, Takayuki	Role of Lipids Reorganized by Viral Proteins and Restriction Factors in Viral Life Cycle	GA	ARO	HBCU
Southern University and A&M College	Yang, Shizhong	High Temperature and Pressure Multicomponent Alloy Design	LA	AFOSR	HBCU
Spelman College	Oliver, Tiffany	Validation of an InVitro Model for Laser Eye Injury and the Adaptive Response in Retinal Pigmented Epithelial Cells	GA	ONR	HBCU
Texas A&M University-Kingsville	Alam, Shah	Ballistic Impact on Composite Armor System	TX	AFOSR	MSI
Tuskegee University	Bhuiyan, Sharif	Development of Automatic Target Recognition and Tracking Algorithm with Novel Detection and Classification Approaches	AL	AFOSR	HBCU
Tuskegee University	Khan, Mohammad	Experimental and Computational Investigation of the Close-Coupled Flow Field of Delta Wings and Vectoring Jets	AL	ONR	HBCU
University of Arkansas-Pine Bluff	Mortazavi, Mansour	Fundamental Material Study of GeSn for Si Photonics Application	AR	AFOSR	HBCU
University of California-Santa Barbara	O'Malley, Michelle	Designing Microbial Consortia for Conversion of Wet Waste to Commodity Chemicals	CA	ARO	MSI
University of Hawaii-Honolulu	Kaiser, Ralf	Untangling the Reaction Mechanisms Involved in the Decomposition of Nitramine-Based Energetic Materials in the Condensed Phase	HI	ARO	MSI
University of North Carolina-Charlotte	Maestas, Cherie	What Feeds Firestorms of Emotion? Emotion Regulation, Emotion Contagion, and Collective Behavior in Socio-Political Events	NC	ARO	MSI
University of North Carolina-Charlotte	Schmitz, Tony	Advanced modeling and simulation of thermal kinetics in additive manufacturing	NC	AFOSR	MSI

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University of Texas-Arlington	Huang, Haiying	Understanding Fundamentals Of Surface-Bonded Piezoelectric Wafer Transducer For Electromechanical Impedance and Ultrasound Shear Wave Monitoring of Sensitization Corrosion	TX	ONR	MSI
University of Texas-El Paso	Velez-Reyes, Miguel	DoD HBCU/MI - Advanced Unmixing of Hyperspectral Remote Sensing Data for Space Situational Awareness	TX	AFOSR	MSI
University of Texas-San Antonio	Mayer, Kathryn	Hybrid Plasmonics at UTSA: Investigating Plasmonic/Magnetic and Plasmonic/Biomolecular Systems	TX	ARO	MSI
University of the District of Columbia	Zhang, Nian	An Intelligent Optimization, Clustering and Classification Framework for Large Scale Photo-Thermal Infrared Imaging Spectroscopy (PT-IRIS) Big Data	DC	ONR	HBCU
Xavier University of Louisiana	Wang, Zhe	Theoretical and Experimental Study of Ionic Liquid-mediated Small Molecule Selective Adsorption	LA	ARO	HBCU
Xavier University of Louisiana	Watt, Terry	Characterizing the Specificity of Class IIa Lysine Deacetylases	LA	ARO	HBCU

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