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FY 2022 DoD HBCU/MSI Research and Education Program

	Institution	Principal Investigator	Proposal Title	ST	Service	Minority Category	USD(R&E) Priority Area
1	Alabama A&M University	Chen, Xiongwen	Quantifying forest structure by LiDAR, RADAR and hyperspectral imaging	AL	ARO	HBCU	Biosciences
2	Alabama A&M University	Heidary, Kaveh	Laboratory for Deep Learning Enhancement Incorporating a Simultaneous-Acquisition Visible-to-LWIR Multispectral Camera-Assemblage	AL	ARO	HBCU	Autonomy & Robotics
3	California State University-Chico	Anderson, Nathan	Acquisition of a GPU/CPU Server for Large-Scale Atomistic Simulations	CA	ARO	HSI	Novel Materials
4	California State University-Dominguez Hills	McCauley, Erin	Acquisition of Analytical Instrumentation to Accelerate Small Molecule Analysis and Expand Research and Educational Infrastructure at CSUDH	CA	ONR	HSI	Emerging Biosciences
5	California State University-Long Beach	Whisler, Daniel	Enhancing Material Testing and Characterization by the Long Beach Engineering Center	CA	AFOSR	HSI	Materials Science
6	Clark Atlanta University	Li, Xinle	Acquisition of a High-Performance 400 MHz NMR Spectrometer for Materials/Physical Science Research and Education at Clark Atlanta University	GA	ARO	HBCU	Chemical Sciences
7	CUNY-City College	Fan, Jing	Coupled microscopy and rheometry for complex material design and analysis	NY	ARO	HSI	Materials Science
8	CUNY-City College	Meriles, Carlos	Acquisition of a dilution refrigerator for the investigation of quantum emitters	NY	ARO	HSI	Microelectronics
9	CUNY-New York City College of Technology	Li, Xiangdong	Support student research and education in computer forensics	NY	ONR	HSI	Computer Sciences
10	CUNY-New York City College of Technology	Zhang, Andy	Undergraduate Research Initiative (URI) for Integration of AI with Robotics and Automation through the Acquisition of Intelligent and Collaborative Robotic Systems	NY	ONR	HSI	Artificial Intelligence
11	Delaware State University	Rana, Mukti	Acquisition of a Raman Spectroscopy System for Research and Education Training of Students on Device Characterization	DE	AFOSR	HBCU	Materials Science

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12	Dillard University	Darwish, Abdalla	Instrumentation for the Investigation of Composite Films	LA	AFOSR	HBCU	Biological Sciences
13	Dominican University	Friesen, John	Essential Imaging Technology for Enhanced Education and Research in STEM Fields at Dominican University	IL	ONR	HSI	Materials Science
14	Florida A&M University	Chauhan, Ashvini	Acquisition of Genomics Instrumentation at Florida A&M University to Enhance Research-based Pedagogical Student Training and Education Projects of Relevance to the DoD	FL	ONR	HBCU	Emerging Biosciences
15	Florida A&M University	Kumar, Rajan	Development of an Inline Air Heating System for the Polysonic Wind Tunnel	FL	ARO	HBCU	Hypersonics
16	Florida A&M University	Sweat, Rebekah	Physical Data-Driven Characterization for Material Science Discovery & Design	FL	AFOSR	HBCU	Materials Science
17	Florida Atlantic University	Kalva, Hari	Personal Cloud for Research and Research-Related Education	FL	ONR	HSI	Cyber Security
18	Florida International University	McDaniel, Dwayne	Heterogeneous Robotics Systems for Mission Support	FL	ARO	HSI	Autonomy & Robotics
19	Florida International University	Pulugurtha, Markondeyaraj	Atomic Layer Deposition Tool for High Power Density and Reliability with Nanoscale Devices	FL	ONR	HSI	Precision Sensing: Electromagnetism
20	Florida International University	Radu, Daniela	Transmission Electron Microscope(TEM) for Research and Education in Nano-Engineered Materials	FL	ONR	HSI	Novel Engineered Materials
21	Georgia State University	Ji, Shihao	Building an AI Laboratory at GSU for Research, Education and Outreach	GA	ARO	MSI/AANAPISI	Artificial Intelligence
22	InterAmerican University of Puerto Rico-Bayamon	Isham, Brett	Acquisition of a High Frequency Radar and Radio Imaging Array for Research in Space Plasma Turbulence, the Ionosphere, the Atmosphere, and Radio Technology	PR	AFOSR	HSI	Precision Sensing: Electromagnetism

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23	Jackson State University	Leszczynski, Jerzy	Building A High-Performance Computing Cluster to Use in Learning Processes and Scientific Research	MS	ARO	HBCU	Computer Sciences
24	Langston University	Quinn, Byron	Flow Cytometry Instrumentation for Research and Education	OK	AFOSR	HBCU	Biosciences
25	Navajo Technical College	Halliday, Harold	Enhancing Metal Additive Manufacturing and Advanced Manufacturing Research at NTU	NM	AFOSR	TCU	Manufacturing
26	New Mexico State University	Zollner, Stefan	Acquisition of a Recirculating Helium Cooler for Research and Education	NM	AFOSR	HSI	Electronic Sensing
27	North Carolina A&T State University	Desai, Salil	Establishment of a Secure and Scalable Digital Manufacturing Infrastructure Platform for Advanced Interdisciplinary Research, Education and Outreach	NC	ONR	HBCU	Manufacturing
28	Prairie View A&M University	Abdelwahed, Sameh	Acquisition of Ultraviolet Visible Near Infrared Spectrophotometry Instrumentation to Expand and Enhance Chemical and Material Science Research in the Department of Chemistry at Prairie View A&M University	TX	ARO	HBCU	Materials Science
29	Prairie View A&M University	Pulikkathara, Merlyn	Increasing teaching, research and outreach capabilities with combined Raman-AFM system	TX	ARO	HBCU	Materials Science
30	San Diego State University	Youssef, George	New Frontiers in Additive Manufacturing of Fiber Reinforced Composite	CA	ONR	HSI	Novel Engineered Materials
31	Sisseton Wahpeton College	Morgan, Scott	Simulator for the enhancement of the Computer Science & Technology education programs at the Sisseton Wahpeton College	SD	ARO	TCU	Computer Sciences
32	Texas A&M University-Kingsville	Ammari, Habib	Building a Research and Educational Lab in the Area of Connected and Heterogeneous Autonomous Vehicle Networks via the Acquisition of Autonomous Ground Vehicles Studio	TX	ARO	HSI	Autonomy & Robotics

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33	Texas A&M University-Kingsville	Hosur, Mahesh	Acquisition of Thermomechanical and Rheological Material Testing Systems for Research and Educational Training in the Characterization of Fiber Reinforced Polymeric Nanocomposites	TX	ONR	HSI	Novel Engineered Materials
34	Texas State University	Chen, Yihong	Acquisition of Wide Frequency Band Characterization System for Electronic Devices, Antennas, and Intelligent Materials	TX	AFOSR	HSI	Microelectronics
35	University of Arizona	Mohammed, Mohammed	Attosecond Scanning Tunneling Microscopy	AZ	AFOSR	HSI	Microelectronics
36	University of Arkansas-Pine Bluff	Behura, Sanjay	Quantum Materials Research Laboratory at the University of Arkansas at Pine Bluff	AR	ONR	HBCU	Quantum Science
37	University of Arkansas-Pine Bluff	Mortazavi, Mansour	Acquisition of Characterization Equipment to Broaden the Middle-Infrared Integrated Microwave Photonics Developments	AR	AFOSR	HBCU	Microelectronics
38	University of California-Irvine	Choi, Bernard	UCI Core Optical Laboratory Resource	CA	AFOSR	MSI/AANAPISI	Biosciences
39	University of California-Merced	Sharping, Jay	Dilution Refrigerator Upgrade for Cutting Edge Quantum Physics	CA	AFOSR	HSI	Quantum Science
40	University of California-Riverside	Karydis, Konstantinos	Learning Human-Robot Interaction Through AR/VR Technologies	CA	ONR	HSI	AI/Man-Machine Interface
41	University of California-Santa Cruz	Lederman, David	High Spatial and Angular Resolution X-Ray Diffractometer for Quantum Material Thin Films and Multilayers	CA	ARO	HSI	Quantum Materials
42	University of Central Florida	Pang, Sean	A WDM Coherent System for High-Speed Photonic Neural Processing and Imaging	FL	ARO	HSI	Computer Sciences
43	University of Central Florida	Vasu Sumathi, Subith	Laser diagnostic system to enhance research and STEM training in energetics and hypersonics	FL	ONR	HSI	Hypersonics

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ARO-Army
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44	University of Central Florida	del Barco, Enrique	Broad-Band THz Spectroscopy System Upgrade for Research and Student Training in High-Frequency Electronics and Spintronics	FL	AFOSR	HSI	Microelectronics
45	University of Illinois-Chicago	Erricolo, Danilo	Three-birds with one stone. High-frequency instrumentation for device characterization and future radar and communication system measurements	IL	ARO	MSI/AANAPISI	Microelectronics
46	University of Illinois-Chicago	Hemley, Russell	Integrated Instrumentation for Enhanced Characterization of Stability and Performance of New High Energy Density Materials	IL	ARO	MSI/AANAPISI	Novel Materials
47	University of Maryland Baltimore County	Carter, Gary	A Microresonator System for Generating Low Noise Microwaves	MD	AFOSR	MSI/AANAPISI	Microelectronics
48	University of Maryland Eastern Shore	Kharel, Madan	Acquisition of an Ultra Performance Liquid Chromatography-Mass Spectrometer (UPLC-MS) to Enhance Interdisciplinary Research and Education at the University of Maryland Eastern Shore	MD	ARO	HBCU	Synthetic Biology
49	University of Nevada-Las Vegas	Odlum, Margaret	Acquisition of a FE-SEM for enhancement of multi-disciplinary research and student training at UNLV	NV	AFOSR	MSI/AANAPISI	Materials Science
50	University of New Mexico	Vorobieff, Peter	High-Speed Flow Characterization System	NM	AFOSR	HSI	Hypersonics
51	University of North Texas	Choi, Tae-Youl	Cancer detection and treatment based on low-level light interaction with biological cells: Augmentation to existing human performance research capabilities	TX	AFOSR	HSI	Human Performance
52	University of Texas-Arlington	Wetz, David	Control of Multi-Wound Electrical Generators Within Intelligent Next-Generation Electrical Power Systems Sourcing Continuous and Transiently Operated Loads	TX	ONR	HSI	Precision Sensing: Electromagnetism
53	University of Texas-Arlington	Yang, Yiran	Naval Onsite/Offshore Repair and (Re)Manufacturing Enabled by Hybrid Additive-Subtractive Manufacturing	TX	ONR	HSI	Novel Engineered Materials

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54	University of Texas-El Paso	Gonzalez, Virgilio	Flexible 5G Testbed for DoD Research Support	TX	ARO	HSI	Cyber
55	University of Texas-El Paso	Nazarian, Soheil	Distributed Acoustic Sensing for Interdisciplinary Geophysical and Civil Engineering Research and Education	TX	ARO	HSI	Earth Sciences
56	University of Texas-El Paso	Roberts, Robert	Two Photon Polymerization 3D Nanofabrication System for Interdisciplinary Applications including Energy Storage, Photonics, Sensors, and Biomedical Structures.	TX	ARO	HSI	Manufacturing
57	University of Texas-Rio Grande Valley	Li, Jianzhi	Acquisition of Metal Additive Manufacturing Machine to Support Defense Manufacturing Research and Innovation at Rio Grande Valley and the National I-DREAM4D Consortium	TX	ARO	HSI	Manufacturing
58	University of Texas-San Antonio	Chabanov, Andrey	Thermal Imaging Infrared Camera for Research on Aerospace Materials and Devices for Extreme Environments	TX	AFOSR	HSI	Materials Science
59	University of Texas-San Antonio	Combs, Christopher	Enabling Four-Dimensional Laser-Induced Fluorescence Measurements of Hypersonic Aerodynamic Phenomena	TX	ONR	HSI	Hypersonics
60	University of the District of Columbia	Azam, Hossain	DoD (HBCU/MSI-Equipment/Instrumentation): Acquisition of HPLC-MS/MS to Accelerate Multidisciplinary Research, Education and Training Capabilities at UDC	DC	ONR	HBCU	Chemical Sciences

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