FY21 DEPSCoR Research Collaboration Winners			
Institution of Higher Education (IHE)	**IHE Location (State)**	**Principal Investigator**	**Project Title**
University of South Alabama	AL	Dr. Prakash Duraisamy	A Comparative Study of Media Consumption in Relation to Healthcare in Rural and Urban Counties in Alabama
University of Connecticut	CT	Dr. Daniel McCarron	Controlled organic chemistry with laser-cooled CH molecules
Yale University	CT	Dr. Amir Pahlavan	Solute-mediated reactive transport in heterogeneous environments
University of Delaware	DE	Dr. Swati Singh	HOTNMS: Harnessing Optomechanical effects for Tailoring Noise properties of Mechanical Sensors
Purdue University	IN	Dr. Qiyu Liang	Subwavelength-spaced atomic arrays as novel light-matter interfaces
Purdue University	IN	Dr. Jukka Vayrynen	Dispersive detection of charge state of a superconducting vortex
Purdue University	IN	Dr. Janelle Wharry	Tailoring Fracture and Fatigue Performance through Hierarchical Porosity in Ti
Iowa State University	IA	Dr. Chao Hu	Topology-Aware Learning and Modeling of High-Rate Dynamic Systems
University of Kentucky	KY	Dr. Daniel Lau	Learning Multilayer and Hypergraph Networks From Data
University of Kentucky	KY	Dr. Savio Poovathingal	Fragmentation and melting of ice particles subjected to hypersonic aerothermodynamic environments
Regents of the University of Minnesota	MN	Dr. Alexander McLeod	Near-Field Analysis of Extended Electronic Wavefunctions in 2D Nanostructures
Washington University in St. Louis	MO	Dr. Erik Henriksen	Pursuit of a topological qubit based on thermal transport of Majorana fermions in Kitaev magnets
Creighton University	NE	Dr. Samer Al-khateeb	Building a computational model of mobs leveraging social science theories
University of Nevada, Reno	NV	Dr. Krista Carlson	Design, Synthesis, and Validation of the Use of Metallic Glass Powders for Additive Manufacturing of Tungsten-Based Components for Extreme Environments
Dartmouth College	NH	Dr. Geoffroy Hautier	Computationally-driven search for new infra-red absorbing semiconductors with long carrier lifetime
The University of New Mexico	NM	Dr. Daniel Banuti	A new paradigm for transcritical injection simulations and understanding
University of North Dakota	ND	Dr. Sougata Roy	A Novel Synergistic Approach of Combining Multiscale DED Processes for Next Generation Hybrid Additive Manufacturing
University of Oklahoma	OK	Dr. Robert Lewis-Swan	Probing the influence of anisotropic and disordered interactions on the dynamics of quantum information in a Rydberg tweezer array
Oregon State University	OR	Dr. Matthew Graham	Emergent Interlayer Magneto-optoelectronics in Twisted Layer Graphene Systems
Clemson University	SC	Dr. William Richardson	Inferring network models from spatial snapshots for systems and synthetic biology applications
University of Tennessee Space Institute	TN	Dr. Reza Abedi	A microstructure-informed and statistical analysis of plasticity and fatigue crack nucleation and propagation