# University of South Carolina — May 2021 New Grant Awards Report **Award Sponsoring Agency** PI's College PI's Department PI Name **Award Title** Total Arnold School of Public Health Applied Research & Evaluation (CARE) exington/Richland Area and Drug 28.129 Moncrieft, Ashley Evaluation Services Proposal for LRADAC's Community Services Department Abuse Council Center for Community Health Alignment The Sisters of Charity Foundation of 35.000 Smithwick, Julie Increasing Capacity to Address Inequities in South Carolina Environmental Health Sciences SC Research Authority (SCRA) 15,000 Lead, Jamie Developing a nano-enabled prototype for the metal removal in electroplating wastes Epidemiology & Biostatistics South Carolina Interdisciplinary Maternal and Child Health Leadership Training Program: Undergraduate Health Resources and Services Pathways - SC MACH UP Administration (HRSA)/HHS 775,000 Liu, Jihong Xiao, Feifei The evolution of copy number variations in the AT-rich Plasmodium genome - Subcontract w/UVA University of Virginia/NIH 219,492 Health Prom., Educ. & Behavior Qualitative Assessment of Health of Older African Americans in South Carolina: Understanding American Association of Retired Persons (AARP) South Carolina 26,672 Disparities in the Context of COVID Annang-Ingram, Lucy Gamifying Social Support to Promote Physical Activity Among Insufficiently Active African American /anderbilt University Medical Adults in the Southeast United States: A Mixed-Methods Approach Center/NIH 74,500 Monroe, Courtney Health Services Policy & Mgmt National Institute on Alcohol Abuse Andrews. Christina Treatment for Alcohol Use Disorder in Medicaid Managed Care and Alcoholism (NIAAA)/NIH \$ 2,573,343 **PASOS** SC Primary Health Care Association/SC Agricultural Worker Health Program/HHS Martin. Maria SC AgWHP-COVID 19 CHW Services 39,600 2021 Sisters of Charity Breaking the Cycle Sisters of Charity Foundation of SC 40,000 Young, Michael College of Arts and Sciences Archaeology & Anthropology Marine Corps Recruit Depot, Parris MCRD Parris Island Artifact Curation Island, SC/DOD 50,000 DePratter, Chester Baruch Institute Georgia Institute of Morris, James Maryville Coastal Wetland Restoration and Community Resiliency (SC) Technology/NFWF/NOAA 45,382 **Biological Sciences**

# University of South Carolina — May 2021 New Grant Awards Report

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		Speiser, Daniel	(PI - Nicholas Steichmann) Investigating the relationship between dynamic color change and endocrine- linked visual organs in caridean shrimp.	Slocum-Lunz Foundation	\$	1,200
	Chamista & Diaghamista					
	Chemistry & Biochemistry			RTI International/Montana State		
		Fountain, Augustus	Technology Review for RTI International	University/DHS	\$	4,800
		Greytak, Andrew	Ligand exchange equilibrium at quantum dot surfaces in polar and aqueous solvent environments	National Science Foundation (NSF)	\$ 44	43,291
		zur Loye, Hans-Conrad	Crystal Growth of New Complex Actinide Containing Oxides, Fluorides and Chalcogenides and the Investigation of their Optical and Magnetic Properties	US Department of Energy (DOE)	\$ 53	27,665
	Criminology & Criminal Justice					
		Klein, Brent	Investigating the Root Causes of School Violence: A Case Control Study of School Violent Offenders, Youth Violent Offenders, and Non-offending Youths	The City University of New York, John Jay College/NIJ/DOJ	\$ 1:	33,619
	Mathematics					
		Tan, Changhui	Nonlocal Transport Equations in Fluids, Swarming, and Traffic Flows	National Science Foundation (NSF)	\$ 18	33,008
		Wang, Qi	Dynamic Multiscale Digital Twin for a Lung Cancer Patient	US Department of Energy (DOE)	\$	50,000
	Payabalagy					
	Psychology	Becker, Kimberly	Scaling Early Detection and Personalized, Evidence-Based Solutions to Treatment Access: A Randomized Controlled Trial of an Online Risk Assessment and Intervention System	Esther A. & Joseph Klingenstein Fund	\$ 10	00,000
		Conte, Stefania	K99/R00 The Development of Face-Processing Abilities in Infants: Structural and Functional Brain Changes During the First Year of Life (Application Identifier 599066)	National Institute of Child Health & Human Development (NICHD)/NIH	\$ 2	16,802
		Wippold, Guillermo	Developing a Community-Informed, Peer-to-Peer Intervention to Improve Health-Related Quality of Life among African American Men	National Institute on Minority Health and Health Disparities (NIMHD)/NIH	\$ 7	71,903
	School of Earth, Ocean & Env.					
	School of Earth, Ocean & Env.	Bourbonnais, Annie	US GEOTRACES GP17-OCE: Mapping nitrous oxide sources through isotopic measurements in the Pacific Ocean	National Science Foundation (NSF)	\$ 4	17,967
		Bulusu, Subrahmanyam	Monitoring Marine Heatwaves along the US East coast using Satellite Observations and model simulations	College of Charleston/NASA (EPSCoR)	\$ :	25,000
			Distinguishing Codiment Compatibile and Altered Constitution in the Course of Newtonia			
		Yogodzinski, Gene	Distinguishing Sediment, Serpentinite, and Altered Oceanic Crust in the Source of Aleutian Volcanic Rocks Using Boron & Molybdenum Isotopes	National Science Foundation (NSF)	\$ 3	70,790
	Statistics			Notice of the first of Otofic for		
		Habing, Brian	IPA for NISS Associate Director for Education Activities and Research	National Institute of Statistical Sciences	\$	71,143
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### University of South Carolina — May 2021 New Grant Awards Report **Award Sponsoring Agency** PI's College PI Name PI's Department **Award Title** Total College of Education Education - Dean's Office All4SC Whole Child earning Policy Institute (LPI) 100.000 Berry, Barnett Educational Studies SC Education Oversight Committee 53.224 Greer, Fred The Kindergarten Readiness Assessment report (KRA report) Leveraging Microdata From South Carolina Integrated Data System to Inform Rural Community Health and Educational Initiatives Illinois Public Health Institute (IPHI) 100,000 Irvin, Matthew Instruction & Teacher Educ. College of Charleston/SC Space Grant Consortium (SCSGC)/NASA 7,500 Lotter, Christine The Bluford x Mae project, College of Engineering & Comp Chemical Engineering Compact Catalytic Membrane Reactor for One-Step High-Efficiency Ammonia Synthesis at Moderate Temperatures and Pressures E2H2NANO, LLC/DOE 449.854 Lauterbach, Jochen Nuvera Fuel Cells, LLC Nuvera Sample Measurement Study Meekins, Benjamin 5,372 Predictive Performance and Life Modeling of Implantable Medical Batteries 2021 43,336 White, Ralph EaglePicher Medical Power, LLC Civil & Environmental Eng. SFSU Subcontract for REU SITE: Collaborative Research: Integrated Academia-Industry Research San Francisco State University/NSF Caicedo, Juan Experience for Undergraduate in Smart Structure Technology (IAIRESST) 56,449 Computer Science & Engineering Tantiv4, Inc. Srivastava, Biplav Task Order 3: A flexible Conversational Agent for home networking setting using Rasa 16,000 Collaborative Research: CNS Core: Medium: Towards Understanding and Handling Problems Due to Coexistence of Multiple IoT Platforms National Science Foundation (NSF) 300.000 Zeng, Qiang Electrical Engineering Development of AlxGa1-xN Multiple Quantum Well UVC Laser Structures over Pulsed Lateral Epitaxially US Army Research Office ARO)/DOD Overgrown Low-defect density AIN templates 99,923 Khan, Asif Mechanical Engineering National Aeronautics & Space Administration (NASA) Banerjee, Sourav HiCAM: Assess SOA NDE for Hi-rate Manufacturing 107,969 Barazanchy, Darun WelDone Simulation of Induction Welding Case Runs and Material Characterization Spirit AeroSystems 36,453 Predictive Manufacturing Solution for BMW MC: Delamination of the G-06 Spoiler BMW 147.971 Bayoumi, Abdel

#### University of South Carolina — May 2021 New Grant Awards Report **Award** PI's Department **Sponsoring Agency** PI's College PI Name **Award Title** Total College of Charleston/SC Space Grant Consortium (SCSGC)/NASA EPSC<sub>0</sub>R 20.000 Novel Unitized Regenerative Solid Oxide Cell to Support NASA's Planetary Exploration Missions Chen, Fanglin Understanding Fundamental Ionic Storage Mechanisms in Atomic Layers of Transition Metal Oxides for Huang, Kevin Next-Generation Zn-ion Batteries US Army (Material Command)/DOD \$ 1,000,000 US Army Research Office Chemical Functional Group Approach for Low-Temperature Oxidation of Liquid Fuels (ARO)/DOD \$ 1,000,000 Won, Sang Hee Wideband nondestructive characterization and defect detection with noncontact laser Lamb waves for College of Charleston/NASA advanced composite materials Yu, Lingyu (EPSCoR) 25,000 College of Nursing Nursing Jonas Nursing and Veterans Andrews. Jeanette Jonas Scholars 2021-2023 - Wandii Healthcare (Jonas)/AACN 15.000 College of Social Work Social Work - Dean's Office Harvard Medical School/Jiangsu ndustrial Technology Research Harvard Social Technology for Global Aging Research Initiative 77.844 Levkoff, Sue nstitute USC Educational Foundation/The 245,000 Seay, Kristen Assessing the Role of Social Determinants in Foster Care Entry and Exit **Duke Endowment** School of Law Children's Law Center SC Department of Social Services Morris, Carolyn (DSS) DSS - Coordination of S.C. Citizens Review Panels 67,911 SC Department of Social Services SC DSS Contract - Court Liaison Program \$ 1,772,580 SC Department of Social Services 88.371 DSS - Children's Justice Act: Support of Task Force (DSS)/HHS S.C. DJJ Training & Services Contract SC Department of Juvenile Justice 244,000 South Carolina Senate Contract South Carolina Senate 358.824 SC Department of Social Services DSS - Children's Justice Act: Operation of Children's Law Center (DSS)/HHS 173,527 SC Department of Social Services DSS - Child Welfare Training (DSS) \$ 1,158,613 SC Department of Social Services DSS - Child Death Investigation Training (DSS) 93,493 SC Department of Social Services DSS - Child Abuse and Neglect Investigation Training (DSS) 190,618 School of Medicine Basic Science Research VA IPA Traci Jones WJB Dorn VA Medical Center/VA 56,334 Spinale, Francis

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University of South Carolina — May 2021 New Grant Awards Report										
Pl's College	PI's Department	PI Name	Award Title Sponsoring Agency		Award Total					
		Montie, Eric	Assessing the influence of anthropogenic noise on Atlantic common bottlenose dolphin (Tursiops truncatus) vocalizations using long-term passive acoustic monitoring in Charleston Harbor, South  Regional Association (SECOORA)/NOAA	\$	1,250					
		Pettay, Daniel	Long-Term Environmental Monitoring of the Port Royal Sound Estuary using Citizen Scientists  Port Royal Sound Foundation	\$	11,442					
		Warren, David	Beaufort County - USCB Water Quality Laboratory  Beaufort County	\$	850,000					
University of SC Upstate										
	UPS Achieve									
		Merriweather, Helen	USC Upstate ACHIEVE 2021-22  Upstate ACHIEVE 2021-22  Upstate ACHIEVE 2021-22  Upstate Workforce Investment Act/DOL	\$	465,794					