

July 17, 2020

The Office of Research and Economic Development is pleased to announce awards received by UNC Charlotte Researchers in the month of June, 2020.

Total amount awarded for the month of June was \$8,015,679

Fiscal Year to Date Total: \$51,833,811

Award Title	Amount	Investigators	PI Dept.	Sponsors
<b>2019-2020 Regional EC Education Consultant and State Performance Plan Consultant</b>	\$11,184	<b>Principal Investigator (PI):</b> Anderson, Kelly	Special Education and Child Development	<b>Sponsor:</b> North Carolina Department of Public Instruction (NCDPI) <b>Prime Sponsor:</b> US Department of Education (DOED)
<b>2020 Proposal: Novel Fluorinated Building Blocks for Application in Magnetic Materials</b>	\$5,000	<b>Principal Investigator (PI):</b> Etzkorn, Markus	Chemistry	<b>Sponsor:</b> American Chemical Society (ACS) Division of Fluorine Chemistry
<b>2020-2021 NC Coaching, Mentoring, Performance Evaluation and Professional Development for Birth Through Kindergarten Licensed Teachers Employed in Nonpublic School Classrooms</b>	\$1,921,798	<b>Principal Investigator (PI):</b> Lambert, Richard	Educational Leadership	<b>Sponsor:</b> North Carolina Department of Health and Human Services (NCDHHS)
<b>2020-2021 Regional EC Education Consultant and State Performance Plan Consultant</b>	\$418,582	<b>Principal Investigator (PI):</b> Anderson, Kelly	Special Education and Child Development	<b>Sponsor:</b> North Carolina Department of Public Instruction (NCDPI) <b>Prime Sponsor:</b> US Department of Education (DOED)
<b>Arts-Based Social Mobility: Exploring Cultural Capital in Charlotte, NC</b>	\$29,000	<b>Principal Investigator (PI):</b> Schmutz, Vaughn <b>Co-PIs:</b> Dalton, Jane; Lambra, Kenneth; Whalen, Margaret	Sociology	<b>Sponsor:</b> National Endowment for the Arts (NEA)
<b>CADENCE-ADULTS: CADENCE AND INTENSITY ACROSS THE ADULT LIFESPAN</b>	\$231,265	<b>Principal Investigator (PI):</b> Tudor-Locke, Catrine	Deans Office College of Health and Human Services	<b>Sponsor:</b> National Institute of Health (NIH) National Institute on Aging (NIA)

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<b>CAREER: Machine and Structure Oblivious Graph Analytics</b>	\$136,526	<b>Principal Investigator (PI):</b> Saule, Erik	Computer Science	<b>Sponsor:</b> National Science Foundation (NSF)
<b>Citizenship and Migration in U.S. Latino/a Children's Literature, 1996-2018.</b>	\$1,500	<b>Principal Investigator (PI):</b> Socolovsky, Maya	English	<b>Sponsor:</b> Children's Literature Association (ChLA)
<b>Collaborative Research: Conceptualizing and Quantifying the Function of Beaver Dams and Stormwater Ponds on the Hydrology and Biogeochemistry of Urban Streams</b>	\$171,528	<b>Principal Investigator (PI):</b> Clinton, Sandra	Geography and Earth Sciences	<b>Sponsor:</b> National Science Foundation (NSF)
<b>Collaborative: Carolina Cyber Defender Scholarship</b>	\$398,966	<b>Principal Investigator (PI):</b> Chu, Bei-Tseng <b>Co-PIs:</b> Al-Shaer, Ehab; Lipford, Heather; Shehab, Mohamed; Wang, Weichao	Software and Information Systems	<b>Sponsor:</b> National Science Foundation (NSF)
<b>Controlling Nano-Structure Formation by Hydrodynamic Instability</b>	\$60,000	<b>Principal Investigator (PI):</b> Egusa, Shunji	Physics and Optical Science	<b>Sponsor:</b> DOD Department of Army (DA) Army Research Office (ARO)
<b>Effects of Aging on Episodic Memory-Dependent Decision-Making</b>	\$19,846	<b>Principal Investigator (PI):</b> Brown, Candace	Public Health Sciences	<b>Sponsor:</b> Duke University <b>Prime Sponsor:</b> National Institutes of Health (NIH)
<b>Effects of Gait Retraining with Auditory Feedback on Biomechanics and Ankle Joint Health in Individuals with Chronic Ankle Instability</b>	\$2,500	<b>Principal Investigator (PI):</b> Donovan, Luke	Kinesiology	<b>Sponsor:</b> National Athletic Trainer's Association (NATA) Research and Education Foundation
<b>EPIC Affiliates Industry Memberships for Seed Funded Projects</b>	\$5,000	<b>Principal Investigator (PI):</b> Kopitopoulou, Christina	Energy Production and Infrastructure Center	<b>Sponsor:</b> YVI-Labs, Inc.

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<b>EPIC Affiliates Industry Memberships for Seed Funded Projects</b>	\$100,000	<b>Principal Investigator (PI):</b> Kopitopoulou, Christina	Energy Production and Infrastructure Center	<b>Sponsor:</b> Siemens Energy
<b>Evaluation of Co-Delivery and Therapeutic Efficacy of siRNA and miRNA to Prostate Cancer by Nucleic Acid Nanovehicles</b>	\$18,875	<b>Principal Investigator (PI):</b> Afonin, Kirill	Chemistry	<b>Sponsor:</b> Ball State University (BSU) <b>Prime Sponsor:</b> National Institutes of Health (NIH)
<b>"Faculty for the Future" Fellowship from the Schlumberger Foundation-Soybean Pest Resistance</b>	\$47,566	<b>Principal Investigator (PI):</b> Song, Bao-Hua	Biological Sciences	<b>Sponsor:</b> Schlumberger Foundation
<b>Full Scale Testing Program of Tindall T-Slab System</b>	\$69,031	<b>Principal Investigator (PI):</b> Braxtan, Nicole <b>Co-PIs:</b> Tempest, Brett; Kernicky, Timothy; Park, Youngjin	Civil and Environmental Engineering	<b>Sponsor:</b> Tindall Corporation
<b>Implementation of a Micro Factory Concept for Component Repair Applications</b>	\$50,000	<b>Principal Investigator (PI):</b> Tarbuton, Joshua	Mechanical Engineering and Engineering Science	<b>Sponsor:</b> Siemens Corporate Technology
<b>Implementing Best Practice Care for Sepsis Survivors to Reduce Morbidity and Mortality</b>	\$36,165	<b>Principal Investigator (PI):</b> Dulin, Michael	Deans Office College of Health and Human Services	<b>Sponsor:</b> Carolina Healthcare System (CHS) <b>Prime Sponsor:</b> National Institutes of Health (NIH)
<b>Improvement of Coal Power Plant Dry Cooling Technology through Application of Cold Thermal Energy Storage</b>	\$495,529	<b>Principal Investigator (PI):</b> Sarunac, Nenad	Energy Production and Infrastructure Center	<b>Sponsor:</b> Department of Energy (DOE)
<b>Leveraging Distributed Manufacturing Assets</b>	\$60,000	<b>Principal Investigator (PI):</b> Tarbuton, Joshua	Energy Production and Infrastructure Center	<b>Sponsor:</b> Siemens Corporate Technology

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<b>Leveraging Multi-Omics Approaches to Examine Metabolic Challenges of Obesity in Relation to Cardiovascular Disease</b>	\$193,315	<b>Principal Investigator (PI):</b> Sha, Wei <b>Co-PI:</b> Du, Xiuxia	Bioinformatics and Genomics	<b>Sponsor:</b> University of North Carolina at Chapel Hill (UNC-CH) <b>Prime Sponsor:</b> National Institutes of Health (NIH)
<b>Mecklenburg Housing Instability &amp; Homelessness Reports 2020</b>	\$35,000	<b>Principal Investigator (PI):</b> Anderson, Bridget	Urban Institute	<b>Sponsor:</b> Mecklenburg County Community Support Services (CSS)
<b>Musculoskeletal Injury, Psychological Distress, and Suicide Among Military Veterans: Understanding Disparities and Barriers to Healthcare Access</b>	\$9,458	<b>Principal Investigator (PI):</b> Cramer, Robert	Public Health Sciences	<b>Sponsor:</b> Tuscaloosa Veterans Affairs Medical Center
<b>National Science Foundation Graduate Research Fellowship Program</b>	\$92,000	<b>Principal Investigator (PI):</b> Reynolds, Thomas	Graduate School	<b>Sponsor:</b> National Science Foundation (NSF)
<b>NCHRP 13-06A [RFP] Guide for the Formulation of Long-Range Plans and Budgets for Replacement of Highway Operations Equipment</b>	\$5,055	<b>Principal Investigator (PI):</b> Fan, Wei	Civil and Environmental Engineering	<b>Sponsor:</b> North Carolina State University (NCSU) Office of Research Innovation and Economic Development <b>Prime Sponsor:</b> Federal Highway Administration (FHWA)
<b>Neuron-Specific Nanotherapeutics for Acute Spinal Cord Injury</b>	\$74,397	<b>Principal Investigator (PI):</b> Afonin, Kirill	Chemistry	<b>Sponsor:</b> Clemson University <b>Prime Sponsor:</b> National Institutes of Health (NIH)
<b>PTAC - DLA 2020-21</b>	\$90,511	<b>Principal Investigator (PI):</b> McIntire, Robin	Small Business Technology Development Center (SBTDC)	<b>Sponsor:</b> North Carolina Small Business and Technology Development Center (NC SBTDC) <b>Prime Sponsor:</b> Department of Defense (DOD) Defense Logistics Agency (DLA)

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<b>Reconfigurable Space: Kinematic Environments Controlled with Computer Vision</b>	\$5,000	<b>Principal Investigator (PI):</b> Dickey, Rachel	School of Architecture	<b>Sponsor:</b> Architectural Research Centers Consortium (ARCC)
<b>Replication: 2016_Liu_etal_OrgBehHumDec Proc</b>	\$10,000	<b>Principal Investigator (PI):</b> Banks, George	Management	<b>Sponsor:</b> Center for Open Science <b>Prime Sponsor:</b> Department of Defense (DOD) Defense Advanced Research Projects Agency (DARPA)
<b>SaTC: EDU: E-SHIELD: Enhancing Security Education inHybrid Mobile and IoT Firmware Through Inclusive, Engaging Learning moDules</b>	\$16,000	<b>Principal Investigator (PI):</b> Sridhar, Meera <b>Co-PI:</b> Ramaprasad, Harini	Software and Information Systems	<b>Sponsor:</b> National Science Foundation (NSF)
<b>SBA Federal SBTDC Budget for the 2020-21 Program Year</b>	\$385,896	<b>Principal Investigator (PI):</b> McIntire, Robin	Small Business Technology Development Center (SBTDC)	<b>Sponsor:</b> North Carolina Small Business and Technology Development Center (NC SBTDC) <b>Prime Sponsor:</b> US Small Business Administration (SBA)
<b>SBIR: Semi-Analytic Fresnel Propagation Simulation Phase II</b>	\$223,551	<b>Principal Investigator (PI):</b> Gbur, Gregory	Physics and Optical Science	<b>Sponsor:</b> MZA Associates Corporation <b>Prime Sponsor:</b> DOD Department of Airforce (DAF) Air Force Office of Scientific Research (AFOSR)
<b>Shaping Teaching and Learning in Stand-Alone M.A. Programs in Religious Studies</b>	\$30,000	<b>Principal Investigator (PI):</b> Brintnall, Kent <b>Co-PI:</b> Maguire, Joanne	Religious Studies	<b>Sponsor:</b> Wabash Center
<b>SHF: Small: Collaborative Research: A Parallel Graph-Based Paradigm for HPC Parallel File System Checkers</b>	\$8,000	<b>Principal Investigator (PI):</b> Dai, Dong	Computer Science	<b>Sponsor:</b> National Science Foundation (NSF)

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<b>Spatial Assessment of Socioeconomic Vulnerabilities to Health Disparities and Nutrition in Mecklenburg and Cabarrus Counties, North Carolina.</b>	\$13,992	<b>Principal Investigator (PI):</b> Delmelle, Eric	Geography and Earth Sciences	<b>Sponsor:</b> Rosedale Assistance and Opportunities <b>Prime Sponsor:</b> Centers for Disease Control and Prevention (CDC)
<b>SpecEES: Intelligent Energy Efficient Spectrum Access for Wireless IoT</b>	\$16,000	<b>Principal Investigator (PI):</b> Xie, Jiang	Electrical and Computer Engineering	<b>Sponsor:</b> National Science Foundation (NSF)
<b>STEM Communication Fellows Program</b>	\$49,674	<b>Principal Investigator (PI):</b> Huerta, Jill <b>Co-PI:</b> Young, Aura	Graduate School	<b>Sponsor:</b> Burroughs Wellcome Fund
<b>Strategic Partnerships &amp; Planning to Support Ending the HIV Epidemic in the U.S.</b>	\$21,129	<b>Principal Investigator (PI):</b> Dulin, Michael <b>Co-PIs:</b> Zarwell, Meagan; Robinson, Patrick	Deans Office College of Health and Human Services	<b>Sponsor:</b> Mecklenburg County Health Department <b>Prime Sponsor:</b> Centers for Disease Control and Prevention (CDC)
<b>STTR: High Performance Microalgae Building Enclosures for Energy Efficient Retrofitting Application</b>	\$70,000	<b>Principal Investigator (PI):</b> Wu, Chengde <b>Co-PI:</b> Parrow, Matthew	School of Architecture	<b>Sponsor:</b> Ecoclosure, LLC <b>Prime Sponsor:</b> National Science Foundation (NSF)
<b>The UNC Chapel Hill Superfund Research Program (UNC-SRP)</b>	\$154,478	<b>Principal Investigator (PI):</b> Vinson, David	Geography and Earth Sciences	<b>Sponsor:</b> University of North Carolina at Chapel Hill (UNC-CH) <b>Prime Sponsor:</b> National Institute of Health (NIH) National Institute of Environmental Health Sciences (NIEHS)
<b>Tier 1 (Improving Mobility) Advanced Multimodal Mobility Solutions and Education</b>	\$1,427,900	<b>Principal Investigator (PI):</b> Fan, Wei <b>Co-PI:</b> Kane, Martin	Civil and Environmental Engineering	<b>Sponsor:</b> US Department of Transportation (DOT)

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<b>Toximap: Computational Framework For Prediction Of Geographical And Temporal Incidence Of Mycotoxins In Us Crop Fields</b>	\$286,472	<b>Principal Investigator (PI):</b> Terejanu, Gabriel	Computer Science	<b>Sponsor:</b> US Department of Agriculture (USDA) National Institute of Food and Agriculture (NIFA)
<b>Transition to a Western Diet and Cardiometabolic Risk: Biomarkers Derived from the Microbiome</b>	\$20,000	<b>Principal Investigator (PI):</b> Fodor, Anthony	Bioinformatics Research Center	<b>Sponsor:</b> University of North Carolina at Chapel Hill (UNC-CH) <b>Prime Sponsor:</b> National Institutes of Health (NIH)
<b>UNC Charlotte Intelligence Community Center of Academic Excellence</b>	\$297,532	<b>Principal Investigator (PI):</b> Walsh, James <b>Co-PI:</b> Conrad, Justin	Political Science and Public Administration	<b>Sponsor:</b> Office of the Director of National Intelligence (ODNI)
<b>UNCC EPIC Support for GE Hitachi's BWRX-300 Construction LTR 5</b>	\$90,657	<b>Principal Investigator (PI):</b> Cox, Robert <b>Co-PIs:</b> Whelan, Matthew; Khire, Milind	Energy Production and Infrastructure Center	<b>Sponsor:</b> GE Hitachi Nuclear Energy (GEH)
<b>Workshop on Undergraduate Teaching with Mathematics and Statistics Action Technologies</b>	\$99,801	<b>Principal Investigator (PI):</b> McCulloch, Allison	Mathematics and Statistics	<b>Sponsor:</b> National Science Foundation (NSF)