

September 9, 2021 (revised)

The Office of Research and Economic Development is pleased to announce awards received by UNC Charlotte Researchers in the month of June, 2021.

Total amount awarded for the month of June was \$4,025,883

Fiscal Year To Date Total: \$57,927,565

Award Title	Amount	Investigators	PI Dept.	Sponsors
CAREER: Machine and Structure Oblivious Graph Analytics	\$81,814	Principal Investigator (PI): Erik Saule	Computer Science	Sponsor: National Science Foundation (NSF)
SCH: INT: Adaptive Partnership for the Robotic Treatment of Autism	\$22,245	Principal Investigator (PI): Robert Pennington	Special Education and Child Development	Sponsor: University of Louisville Prime Sponsor: National Science Foundation (NSF)
Developing and Implementing Healthy Food Guidelines for UNC Charlotte Fast Food Vendors	\$74,999	Principal Investigator (PI): Elizabeth Racine Fussell Co-PI: Maren Coffman	Public Health Sciences	Sponsor: North Carolina Department of Health and Human Services (NCDHHS) Prime Sponsor: Department of Health and Human Services (DHHS) Centers for Disease Control and Prevention (CDC)
Arclin Fire Resistant Coatings: Experimental Fire Testing	\$4,082	Principal Investigator (PI): Nicole Braxtan Co-PI: David Weggel	Civil and Environmental Engineering	Sponsor: Arclin Surfaces LLC
Predictive highway maintenance through automated visual analytics and hotspot analysis.	\$51,200	Principal Investigator (PI): Omidreza Shoghli Co-PI: Hamed Tabkhivayghan	Engineering Technology and Construction Management	Sponsor: Leidos Holdings, Inc. Prime Sponsor: Virginia Department of Transportation
Collaborative Research: Conceptualizing and quantifying the function of beaver dams and stormwater ponds on the hydrology and biogeochemistry of urban streams	\$16,716	Principal Investigator (PI): Sandra Clinton	Geography and Earth Sciences	Sponsor: National Science Foundation (NSF)

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IUCRC Phase III University of North Carolina at Charlotte: Center for Metamaterials (CfM)	\$251,438	Principal Investigator (PI): Ishwar Aggarwal Co-PI: Tino Hofmann	Physics and Optical Science	Sponsor: National Science Foundation (NSF)
Development of Manufacturing Equipment Digital Twin Integration with Cyber-Physical Emulation Range	\$74,986	Principal Investigator (PI): Aidan Browne Co-PIs: Thomas Moyer, Wesley Williams	Engineering Technology and Construction Management	Sponsor: MxD (Manufacturing times Digital) Prime Sponsor: Department of Defense (DOD) Department of the Army (DA) Army Contracting Command (AMC)
Synergistic DNA repair genes and sensitivity to radiation therapy in prostate cancer	\$446,505	Principal Investigator (PI): Junya Tomida Co-PIs: Richardson, Shan Yan, Jun-tao Guo	Biological Sciences	Sponsor: Department of Health and Human Services (DHHS) National Institutes of Health (NIH)
Intelligent Wireless Power Transfer (IWPT) for Safe Electric Power Charging of Rolling Stock	\$165,797	Principal Investigator (PI): Tiefu Zhao Co-PIs: Nicole Braxtan, Shen-En Chen	Electrical and Computer Engineering	Sponsor: Department of Transportation (DOT) Federal Railroad Administration
Geo-FRIT: A Web-based Geospatial Analytics Tool for Freight Risk and Resilience in Transportation	\$324,325	Principal Investigator (PI): Wenwu Tang Co-PIs: Wei Fan, Eric Delmelle, Shen-En Chen	Geography and Earth Sciences	Sponsor: North Carolina Department of Transportation (NCDOT) Prime Sponsor: Department of Transportation (DOT) Federal Highway Administration (FHWA)
Understanding the Effects of Covid-19 on Older Black Adults: Health, Caregiving, and Coping	\$23,000	Principal Investigator (PI): Kendra Jason	Sociology	Sponsor: University of Arizona Prime Sponsor: Department of Health and Human Services (DHHS) National Institutes of Health (NIH)
IUSE: The Effects of Course Structure and Sociality on the Success of Different Intersectional Groups of Students in Undergraduate Computing Education	\$356,996	Principal Investigator (PI): Mary Maher Co-PIs: Tonya Frevert, Marlon Mejias, Audrey Rorrer	Software and Information Systems	Sponsor: National Science Foundation (NSF)

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Healthy Wells I - year 5 extension	\$43,583	Principal Investigator (PI): Eric Delmelle	Geography and Earth Sciences	Sponsor: Gaston County Health & Human Services Prime Sponsor: Department of Health and Human Services (DHHS) Centers for Disease Control and Prevention (CDC)
Visualization software for genomics	\$359,685	Principal Investigator (PI): Ann Loraine	Bioinformatics and Genomics	Sponsor: Department of Health and Human Services (DHHS) NIH National Institute of General Medical Sciences (NIGMS)
Landscape Study: Services and Supports in Mecklenburg County, Prenatal through Age 3 - A project of the Social Aspects of Health Initiative	\$10,000	Principal Investigator (PI): Laura Armstrong Co-PIs: Ariana Shahinfar, Eric Delmelle, Joseph Kangmennaang, Stephanie Potochnick, Ryan Kilmer	Psychological Science	Sponsor: Mecklenburg County Smart Start Partnership for Children
Center for Additive Manufacture of Advanced Ceramics (CAMAC)	\$1,250,000	Principal Investigator (PI): Brigid Mullany Co-PI: Steven Schmid	College of Engineering	Sponsor: University of North Carolina System Office (UNC SysOff)
Biomedical Data Integration and Discovery Platform	\$18,222	Principal Investigator (PI): Jeremy Jay	Bioinformatics and Genomics	Sponsor: North Carolina Biotechnology Center (NCBC)
Discovering Gene Regulatory Hotspots for Malaria Therapeutics	\$20,000	Principal Investigator (PI): Kausik Chakrabarti	Biological Sciences	Sponsor: North Carolina Biotechnology Center (NCBC)
Borate-mediated chromatography of carbohydrates and glycopeptides	\$20,000	Principal Investigator (PI): Brian Cooper	Chemistry	Sponsor: North Carolina Biotechnology Center (NCBC)

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Evaluation of the Implementation of the K-3 Formative Assessment 2021	\$217,651	Principal Investigator (PI): Richard Lambert	Educational Leadership	Sponsor: North Carolina Department of Public Instruction (NCDPI)
All Arrested Up and No Place to Go: Assessing the Public Safety Impact of Limited Prosecutorial Resources and Capabilities in Charlotte, North Carolina	\$75,000	Principal Investigator (PI): Joseph Kuhns	Criminal Justice and Criminology	Sponsor: Charlotte Police Foundation
Graduate Assistantship with Innervision	\$21,206	Principal Investigator (PI): Richard McAnulty	Psychological Science	Sponsor: Innervision
Brookhill Community Asset/Needs Assessment	\$45,518	Principal Investigator (PI): Angelique Gaines Co-PIs: Khou Xiong, Marye Thomas	Urban Institute	Sponsor: United Way of Central Carolinas
Transportation Stakeholder Interviews	\$10,915	Principal Investigator (PI): Khou Xiong Co-PI: Bridget Anderson	Urban Institute	Sponsor: Charlotte Regional Business Alliance
McKinney-Vento Mini-Grant	\$4,000	Principal Investigator (PI): Pamela Broome	College of Education	Sponsor: North Carolina Department of Public Instruction (NCDPI) Prime Sponsor: Department of Education (DOED) US Department of Education
Enhanced Modeling for Power Market Simulation	\$36,000	Principal Investigator (PI): Linquan Bai	Systems Engineering and Engineering Management	Sponsor: ABB Enterprise Software Inc.