

April 28, 2019 (revised)

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

Total amount awarded for the month of March was \$3,151,949

Fiscal Year To Date Total: \$47,499,655

<b>Award Title</b>	<b>Amount</b>	<b>Investigators</b>	<b>PI Dept.</b>	<b>Sponsors</b>
<b>Applied Research and Evaluation Graduate Assistantship - City of Charlotte</b>	\$43,258	<b>Principal Investigator (PI):</b> Kilmer, Ryan <b>Co-PIs:</b> Cook, James	Psychological Science	<b>Sponsor:</b> City of Charlotte
<b>Archaeology of Dependency in the Royal Necropolis of the Oyo Empire (Nigeria)</b>	\$31,200	<b>Principal Investigator (PI):</b> Ogundiran, Akinwumi	Africana Studies	<b>Sponsor:</b> Archaeological Institute of America (AIA) <b>Prime Sponsor:</b> Archaeological Institute of America (AIA)-The National Endowment for the Humanities (NEH) Grants for Archaeological Research
<b>Bacterial Cell Wall synthesis, shape and separtion</b>	\$15,100	<b>Principal Investigator (PI):</b> Troutman, Jerry <b>Co-PIs:</b> Eade, Colleen	Chemistry	<b>Sponsor:</b> University of Arkansas for Medical Sciences <b>Prime Sponsor:</b> National Institutes of Health (NIH)
<b>Calcium: magnesium balance, microbiota, and necroptosis and inflammation</b>	\$151,000	<b>Principal Investigator (PI):</b> Fodor, Anthony <b>Co-PIs:</b> Fouladi, Farnaz; Sun, Shan	Bioinformatics and Genomics	<b>Sponsor:</b> Vanderbilt University Medical Center <b>Prime Sponsor:</b> National Institutes of Health (NIH)
<b>Camino Fit Fostering Interprofessional Practice in a Latino Community Center to Improve Health and Wellness</b>	\$31,230	<b>Principal Investigator (PI):</b> Bellar, David <b>Co-PIs:</b> Moore-Harrison, Trudy	Kinesiology	<b>Sponsor:</b> Camino Community Development Corporation, Inc.
<b>Community Innovation Incubator: Advancing West Charlotte's Pursuit of a Food Retail Solution</b>	\$272,100	<b>Principal Investigator (PI):</b> White, Byron <b>Co-PIs:</b> Joy, Chrystal; Hammelman, Colleen; Thomas, Marye	Urban Research & Comm Engagement	<b>Sponsor:</b> Mecklenburg County Managers Office

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<b>Community-based participatory research to better understand the role of food insecurity in childhood overweight</b>	\$2,016	<b>Principal Investigator (PI):</b> Racine, Elizabeth	Public Health Sciences	<b>Sponsor:</b> Carolinas HealthCare System NorthEast <b>Prime Sponsor:</b> Duke Endowment
<b>Data-Driven Analytics Tools to Support Prioritized Management of Stormwater Infrastructure</b>	\$60,000	<b>Principal Investigator (PI):</b> Barclay, Nicole <b>Co-PIs:</b> Smith, Michael	Engineering Technology and Construction Management	<b>Sponsor:</b> North Carolina State University (NCSU) Water Resources Research Institute (WRRI)
<b>Degradation of Antibiotic Resistance Genes Using Hydroxyl and Sulphate Radicals</b>	\$10,000	<b>Principal Investigator (PI):</b> Munir, Mariya <b>Co-PIs:</b> Sorinolu, Adeola	Civil and Environmental Engineering	<b>Sponsor:</b> North Carolina State University (NCSU) Water Resources Research Institute (WRRI)
<b>EnyorÃ³: A Collective Biography of Black Matanzas (Cuba) from Slavery to Nation-Making, 1835-1898</b>	\$35,000	<b>Principal Investigator (PI):</b> De la Torre Cueva, Oscar	Africana Studies	<b>Sponsor:</b> National Humanities Center
<b>Evaluation for LENS-NC</b>	\$5,500	<b>Principal Investigator (PI):</b> Harden, Susan	Middle, Secondary and K-12 Education	<b>Sponsor:</b> Center for Racial Equity in Education (CREED)
<b>Exploring the Emergence of Social Inequality during the Terminal Archaic Period (4,500-3,600 cal BP) in the Eastern Andes of Tarija, Bolivia</b>	\$17,174	<b>Principal Investigator (PI):</b> Juengst, Sara	Anthropology	<b>Sponsor:</b> Pennsylvania State University (PENN STATE) <b>Prime Sponsor:</b> National Science Foundation (NSF)
<b>FMNet: Future Manufacturing: A Network for Cybermanufacturing in Machining</b>	\$16,000	<b>Principal Investigator (PI):</b> Schmid, Steven <b>Co-PIs:</b> Mullany, Brigid	Mechanical Engineering and Engineering Science	<b>Sponsor:</b> National Science Foundation (NSF)
<b>Graduate Assistant to Support Evaluation of Read Charlotte</b>	\$35,991	<b>Principal Investigator (PI):</b> Cook, James <b>Co-PIs:</b> Kilmer, Ryan	Psychological Science	<b>Sponsor:</b> Foundation For The Carolinas (FFTC)
<b>Heat-Activated Persulfate Regeneration of Ion Exchange Resins for Per- and Polyfluoroalkyl Substance Treatment</b>	\$60,000	<b>Principal Investigator (PI):</b> Sun, Mei	Civil and Environmental Engineering	<b>Sponsor:</b> NCSU Water Resources Research Institute (WRRI)

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<b>High Photon Density Spatiotemporal (OAM+SAM) Vector Beams for Maritime Environments</b>	\$50,000	<b>Principal Investigator (PI):</b> Gbur, Gregory	Physics and Optical Science	<b>Sponsor:</b> Clemson University <b>Prime Sponsor:</b> Department of Defense (DOD) Department of the Navy (DN) Office of Naval Research (ONR)
<b>High-speed Machining &amp; Metrology for Freeform Lens Arrays &amp; Multi-Sided Freeforms</b>	\$57,314	<b>Principal Investigator (PI):</b> Davies, Matthew <b>Co-PIs:</b> Suleski, Thomas	Mechanical Engineering and Engineering Science	<b>Sponsor:</b> University of Rochester <b>Prime Sponsor:</b> National Science Foundation (NSF)
<b>Inclusive Computing Diagnostic Grant</b>	\$60,000	<b>Principal Investigator (PI):</b> Maher, Mary <b>Co-PIs:</b> Cukic, Bojan; Karnas-Haines, Colleen	Software and Information Systems	<b>Sponsor:</b> Northeastern University <b>Prime Sponsor:</b> Pivotal Ventures
<b>Investigation of ssDNA binding proteins and protein-ssDNA interactions</b>	\$435,894	<b>Principal Investigator (PI):</b> Guo, Jun-tao	Bioinformatics and Genomics	<b>Sponsor:</b> National Institutes of Health (NIH)
<b>Label-Free Reconfigurable Microscopy with High Specificity</b>	\$100,000	<b>Principal Investigator (PI):</b> Porras-Aguilar, Rosario	Physics and Optical Science	<b>Sponsor:</b> Research Corporation for Science Advancement (Rescorp)
<b>Membership funds: Phase II IUCRC University of North Carolina Charlotte: Center for Cybersecurity Analytics and Automation CCAA</b>	\$50,000	<b>Principal Investigator (PI):</b> Lipford, Heather <b>Co-PIs:</b> Cukic, Bojan	Software and Information Systems	<b>Sponsor:</b> All Other Associations
<b>Mind the (Implementation) Gap: A Critical Analysis of Police Department Commitment to Community-Oriented Policing, Its Implementation Process, and Outcomes</b>	\$1,965	<b>Principal Investigator (PI):</b> Langhinrichsen-Rohling, Jennifer <b>Co-PIs:</b> McMillan, Iris; Mooney, Jan; Siegal, Rachel	Psychological Science	<b>Sponsor:</b> Society for the Psychological Study of Social Issues (SPSSI)
<b>Mineta National Transportation Research Consortium (MNTRC)</b>	\$299,994	<b>Principal Investigator (PI):</b> Pulugurtha, Srinivas <b>Co-PIs:</b> Duddu, Venkata Ramana	Civil and Environmental Engineering	<b>Sponsor:</b> San Jose State University <b>Prime Sponsor:</b> US Department of Transportation (DOT)

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<b>NCDOT Center of Excellence on Connected and Autonomous Vehicles</b>	\$62,307	<b>Principal Investigator (PI):</b> Fan, Wei	Civil and Environmental Engineering	<b>Sponsor:</b> North Carolina Agricultural and Technical State University (NCAT) <b>Prime Sponsor:</b> North Carolina Department of Transportation (NCDOT)
<b>Neuron-specific nanotherapeutics for acute spinal cord injury</b>	\$74,032	<b>Principal Investigator (PI):</b> Afonin, Kirill	Chemistry	<b>Sponsor:</b> Clemson University <b>Prime Sponsor:</b> National Institutes of Health (NIH)
<b>Phase II CfM Industry Membership Funds</b>	\$45,000	<b>Principal Investigator (PI):</b> Aggarwal, Ishwar	Physics and Optical Science	<b>Sponsor:</b> All Other Business and Industry
<b>Piloting the use of NLP to understand philanthropic funding</b>	\$47,250	<b>Principal Investigator (PI):</b> Scott, Victoria	Psychological Science	<b>Sponsor:</b> Finger Lakes Law and Social Policy Center, Inc. <b>Prime Sponsor:</b> Robert Wood Johnson Foundation (RWJF)
<b>Quantifying the Impact of Electronic Health Record Data Quality and Bias to Support Reliable Personalized CVD Risk Prediction for Patients with Diabetes</b>	\$3,294	<b>Principal Investigator (PI):</b> Diaz Garelli, Franck	Public Health Sciences	<b>Sponsor:</b> Washington University in Saint Louis <b>Prime Sponsor:</b> National Institutes of Health (NIH)
<b>RoL: NSFDEB-BSF: Studying the evolution of the antiviral pathway in a cnidarian model interacting with diverse viral communities</b>	\$817,970	<b>Principal Investigator (PI):</b> Reitzel, Adam	Biological Sciences	<b>Sponsor:</b> National Science Foundation (NSF)
<b>SaTC: CORE: Small: Collaborative: Techniques for Enhancing the Security and Trust of FPGAs-Based Systems</b>	\$16,000	<b>Principal Investigator (PI):</b> Saqib, Fareena	Electrical and Computer Engineering	<b>Sponsor:</b> National Science Foundation (NSF)
<b>SBIR: NextGen analog front end (AFE) platform for lightweight, long term cortical monitoring</b>	\$78,791	<b>Principal Investigator (PI):</b> Holleman, Jeremy	Electrical and Computer Engineering	<b>Sponsor:</b> NeuroDyne <b>Prime Sponsor:</b> National Science Foundation (NSF)

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<b>SBIR: RAPID SPLINE SCANNING SYSTEM</b>	\$6,500	<b>Principal Investigator (PI):</b> Morse, Edward	Mechanical Engineering and Engineering Science	<b>Sponsor:</b> United Protective Technologies <b>Prime Sponsor:</b> Department of Defense (DOD) Department of the Navy (DN)
<b>SBIR: Real-time Muzzle Velocity Feedback System Using Electric Field Sensors</b>	\$17,105	<b>Principal Investigator (PI):</b> Noras, Maciej	Engineering Technology and Construction Management	<b>Sponsor:</b> Triton Systems, Inc <b>Prime Sponsor:</b> Department of Defense (DOD)
<b>SBTDC State Funding 20-21</b>	\$5,000	<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>Suicidal Behavior among Sexual and Gender Minority Individuals: Exploring the Role of Minority Stress Models within a Suicide Ideation-to-Action Framework</b>	\$9,000	<b>Principal Investigator (PI):</b> Cramer, Robert <b>Co-PIs:</b> Kaniuka, Andrea; Warren-Findlow, Jan; Bowling, Jessamyn	Public Health Sciences	<b>Sponsor:</b> American Psychological Foundation (APF)
<b>The UNC Chapel Hill Superfund Research Program (UNC-SRP)</b>	\$83,173	<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 Institutes of Health (NIH) National Institute of Environmental Health Sciences (NIEHS)
<b>Wastewater based tracking of SARS-CoV-2 across Charlotte region in North Carolina</b>	\$45,791	<b>Principal Investigator (PI):</b> Munir, Mariya	Civil and Environmental Engineering	<b>Sponsor:</b> City of Charlotte