

December 16, 2020 (revised)

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

Total amount awarded for the month of November was \$3,228,969

Fiscal Year To Date Total: \$35,472,138

Award Title	Amount	Investigators	PI Dept.	Sponsors
12th Annual NASA Robotic Mining Competition - Team Competition Grant	\$5,000	Principal Investigator (PI): Browne, Aidan Co-PI: Smith, Michael	Engineering Technology and Construction Management	Sponsor: North Carolina Space Grant Consortium (NC Space Grant) Prime Sponsor: National Aeronautics and Space Administration (NASA)
2020-2021 Charlotte-Mecklenburg Quality of Life Study (County)	\$20,000	Principal Investigator (PI): Zager, Kathryn	Urban Institute	Sponsor: Mecklenburg County Managers Office
2020-2021 Junior Science & Humanities Symposium (JSHS)	\$21,000	Principal Investigator (PI): Wickliff, Alisa Co-PI: Pugalee, David	Center for STEM Education	Sponsor: National Science Teachers Association (NSTA) Prime Sponsor: Department of Defense (DOD)
2020-2021 NCSIP IHE Partnership	\$10,000	Principal Investigator (PI): Reinke, Luke	Reading and Elementary Education	Sponsor: North Carolina Department of Public Instruction (NCDPI) Prime Sponsor: US Department of Education (DOED)
2020-2021 State Systemic Improvement Plan (SIP) Evaluation	\$78,820	Principal Investigator (PI): Anderson, Kelly Co-PI: Westine, Carl	Special Education and Child Development	Sponsor: North Carolina Department of Public Instruction (NCDPI) Prime Sponsor: US Department of Education (DOED)
49er Rocketry USLI Competition Experience Grant	\$5,000	Principal Investigator (PI): Dahlberg, Jerry	Mechanical Engineering and Engineering Science	Sponsor: North Carolina Space Grant Consortium (NC Space Grant) Prime Sponsor: National Aeronautics and Space Administration (NASA)

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AOF analysis in NC source water	\$60,000	Principal Investigator (PI): Sun, Mei	Civil and Environmental Engineering	Sponsor: North Carolina Policy Collaboratory
Behavioral Healthcare Leadership Academy II	\$60,363	Principal Investigator (PI): Richardson, Sonya	School of Social Work	Sponsor: Cardinal Innovations Healthcare Solutions
CAREER: Transition Metal Chalcogenide Clusters: Preformed Building Blocks for Framework Materials	\$207,768	Principal Investigator (PI): Bejger, Christopher Co-PI: Dickey, Rachel	Chemistry	Sponsor: NSF Directorate for Mathematical and Physical Sciences (MPS)
Charlotte Mecklenburg Senior Center - Graduate Student Support	\$50,536	Principal Investigator (PI): Moore-Harrison, Trudy	Kinesiology	Sponsor: Mecklenburg County Parks and Recreation Department
CHS: SMALL: Promoting Unexpected Information Discovery: An Interactive Framework for Computational Serendipity	\$16,000	Principal Investigator (PI): Niu, Xi Co-PI: Maher, Mary	Software and Information Systems	Sponsor: National Science Foundation (NSF)
CHS: SMALL: Promoting Unexpected Information Discovery: An Interactive Framework for Computational Serendipity	\$298,625	Principal Investigator (PI): Niu, Xi Co-PI: Maher, Mary	Software and Information Systems	Sponsor: National Science Foundation (NSF)
Cost Effective Rare-Earth-Free Flux Doubling, Torque Doubling, 8X Power Density Traction Motor with Near-Zero Open-Circuit Back-EMF and No Cogging Torque	\$210,638	Principal Investigator (PI): Essakiappan, Somasundaram Co-PI: Manjrekar, Madhav	Energy Production and Infrastructure Center	Sponsor: Department of Energy (DOE)
Determination of electrical and geometrical characteristics of mine-like and IED-like targets using new globally convergent inverse algorithms	\$197,610	Principal Investigator (PI): Klibanov, Mikhail Co-PIs: Nguyen, Loc; Kitchin, Steven; Astratov, Vasily	Mathematics and Statistics	Sponsor: DOD DA Army Research Office (ARO)

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Developing an Estimate of Needed Nutrient Load Reductions for Jordan Lake Using a Three-Dimensional Water Quality Model	\$117,396	Principal Investigator (PI): Bowen, James Co-PI: Langley, William	Civil and Environmental Engineering	Sponsor: NCDENR Division of Water Resources (DWR) Prime Sponsor: United States Environmental Protection Agency (EPA)
Establishing a Workforce Development Consortium for a Pilot AI-Cybersecurity Certification based National Training Program	\$502,838	Principal Investigator (PI): Saqib, Fareena Co-PI: Raja, Shagufta	Electrical and Computer Engineering	Sponsor: Purdue University Northwest Prime Sponsor: Department of Defense (DOD) National Security Agency (NSA)
Inclusion of Elementary Students with ASD in Check-In/Check-Out	\$1,999	Principal Investigator (PI): Lo, Ya-yu Co-PI: Carpenter, Megan	Special Education and Child Development	Sponsor: Organization for Autism Research (OAR)
Interactions between diet and cognition	\$23,325	Principal Investigator (PI): Fodor, Anthony	Bioinformatics and Genomics	Sponsor: University of Southern California (USC) Prime Sponsor: National Institutes of Health (NIH)
iPads for Madison Saints Paradise South Service-Learning with UNC Charlotte Gerontology Students	\$5,103	Principal Investigator (PI): Hancock, Cynthia	Sociology	Sponsor: Southminster Inc. Prime Sponsor: U.S. Department of the Treasury
LabWare Aerodynamic research.	\$124,322	Principal Investigator (PI): Jenckes, Charles	Mechanical Engineering and Engineering Science	Sponsor: LabWare, Inc.
Minority Owned Business Ecosystem	\$5,000	Principal Investigator (PI): Gaines, Angelique	Urban Institute	Sponsor: Charlotte Center City Partners
Minority Owned Business Ecosystem	\$10,000	Principal Investigator (PI): Gaines, Angelique	Urban Institute	Sponsor: Honeywell International, Inc.

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Minority-Owned Business Ecosystem	\$27,325	Principal Investigator (PI): Gaines, Angelique Co-PIs: Zager, Kathryn; Branner, Katrice; Thomas, Marye	Urban Institute	Sponsor: Bank of America
Minority-Owned Business Ecosystem	\$10,000	Principal Investigator (PI): Gaines, Angelique	Urban Institute	Sponsor: Duke Energy Foundation
RPP HS Strand (Small): Preparing High School Teachers to Broaden Participation by Teaching Programming Online	\$299,848	Principal Investigator (PI): Perez Quinones, Manuel Co-PI: Pugalee, David; Martin, Florence; Ahlgrim-Delzell, Lynn	Software and Information Systems	Sponsor: National Science Foundation (NSF)
Securing American Manufacturing (SAM) - Task Order GFY21 to Basic Ordering Agreement (BOA) 4100001085(IPF 19-0829)	\$410,000	Principal Investigator (PI): Browne, Aidan Co-PI: Moyer, Thomas; Williams, Wesley	Engineering Technology and Construction Management	Sponsor: Consolidated Nuclear Security, LLC (CNS) Prime Sponsor: Department of Energy (DOE)
SoutheastCon 2021 Hardware Competition	\$5,000	Principal Investigator (PI): Conrad, James	Electrical and Computer Engineering	Sponsor: North Carolina Space Grant Consortium (NC Space Grant) Prime Sponsor: National Aeronautics and Space Administration (NASA)
Teacher Education for Equitable Mathematics Instruction: An Exploratory Study of Noyce Program Impacts	\$21,098	Principal Investigator (PI): Fernandes, Anthony	Mathematics and Statistics	Sponsor: University of Arizona Prime Sponsor: National Science Foundation (NSF)
The Impact of Nebulization on Viral Transmission in a Porcine Model	\$73,273	Principal Investigator (PI): Ring, Brian Co-PI: Sombatsaphay, Vilayvone; Huet, Yvette	Kinesiology	Sponsor: Theravance Biopharma R&D, Inc.

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Workforce Partner Support Program - Business Analysis and Process	\$40,920	Principal Investigator (PI): Haines, Asher	Extended Academic Programs	Sponsor: City of Charlotte Prime Sponsor: U.S. Department of the Treasury
Workforce Partner Support Program - Coding Boot Camp	\$49,000	Principal Investigator (PI): Haines, Asher	Extended Academic Programs	Sponsor: City of Charlotte Prime Sponsor: U.S. Department of the Treasury
Workforce Partner Support Program - Cybersecurity Boot Camp	\$30,665	Principal Investigator (PI): Haines, Asher	Extended Academic Programs	Sponsor: City of Charlotte Prime Sponsor: U.S. Department of the Treasury
Workforce Partner Support Program - Data Analytics Boot Camp	\$21,000	Principal Investigator (PI): Haines, Asher	Extended Academic Programs	Sponsor: City of Charlotte Prime Sponsor: U.S. Department of the Treasury
Workforce Partner Support Program - FinTech Boot Camp	\$14,000	Principal Investigator (PI): Haines, Asher	Extended Academic Programs	Sponsor: City of Charlotte Prime Sponsor: U.S. Department of the Treasury
Workforce Partner Support Program - HR Learning and Development	\$49,422	Principal Investigator (PI): Haines, Asher	Extended Academic Programs	Sponsor: City of Charlotte Prime Sponsor: U.S. Department of the Treasury
Workforce Partner Support Program - Medical Coding Certificate	\$48,020	Principal Investigator (PI): Haines, Asher	Extended Academic Programs	Sponsor: City of Charlotte Prime Sponsor: U.S. Department of the Treasury
Workforce Partner Support Program - Paralegal Certificate	\$48,675	Principal Investigator (PI): Haines, Asher	Extended Academic Programs	Sponsor: City of Charlotte Prime Sponsor: U.S. Department of the Treasury
Workforce Partner Support Program - Project Management Certificate	\$49,380	Principal Investigator (PI): Haines, Asher	Extended Academic Programs	Sponsor: City of Charlotte Prime Sponsor: U.S. Department of the Treasury