

May 15, 2020

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

Total amount awarded for the month of April was \$2,995,942

Fiscal Year To Date Total: \$40,384,923

Award Title	Amount	Investigators	PI Dept.	Sponsors
Analyze Total PFAS Concentrations After an AFFF Spill Event	\$18,500	Principal Investigator (PI): Sun, Mei	Civil and Environmental Engineering	Sponsor: North Carolina Policy Collaboratory
Bookselling in Early Modern England	\$6,000	Principal Investigator (PI): Melnikoff, Kirk	English	Sponsor: National Endowment for the Humanities (NEH)
Calcium: Magnesium Balance, Microbiota, and Necroptosis and Inflammation	\$130,766	Principal Investigator (PI): Fodor, Anthony	Bioinformatics and Genomics	Sponsor: Vanderbilt University Medical Center Prime Sponsor: National Institutes of Health (NIH)
Charlotte Water Technical Services and Student Experiential Learning FY 19-21	\$259,515	Principal Investigator (PI): Keen, Olya Co-PI: Bowen, James	Civil and Environmental Engineering	Sponsor: City of Charlotte
Confidential	\$443,775	Principal Investigator (PI): Daniels, John	Civil and Environmental Engineering	Sponsor: Confidential Prime Sponsor: Confidential
CSDM-B: Radialene Radicals: Aqueous Soluble Organics for Energy Storage	\$456,394	Principal Investigator (PI): Bejger, Christopher	Chemistry	Sponsor: National Science Foundation (NSF)
Determination of Electrical and Geometrical Characteristics of Mine-Like and IED-Like Targets Using New Globally Convergent Inverse Algorithms	\$105,999	Principal Investigator (PI): Klibanov, Mikhail Co-PI: Astratov, Vasily	Mathematics and Statistics	Sponsor: DOD Department of Army (DA) Army Research Office (ARO)

Award Title	Amount	Investigators	PI Dept.	Sponsors
Digital Humanities Youth Exhibition: Educating African Americans in Charlotte, NC (1920-2020)	\$3,150	Principal Investigator (PI): Lewis, Chance	Middle, Secondary and K-12 Education	Sponsor: North Carolina Humanities Council Prime Sponsor: National Endowment for the Humanities (NEH)
Excitons and Exciton-Polaritons in Novel Organic-Inorganic Hybrids With Sub-Nano Inorganic Layers	\$132,191	Principal Investigator (PI): Zhang, Yong Co-PI: Schmedake, Thomas	Electrical and Computer Engineering	Sponsor: DOD Department of Army (DA) Army Research Office (ARO)
GastonWaterMap: A WebGIS to Inform Private Well Owners in Gaston County of Groundwater Quality	\$60,000	Principal Investigator (PI): Delmelle, Eric	Geography and Earth Sciences	Sponsor: NCSU Water Resources Research Institute (WRRI)
In Vitro and Cellular Tools for Complex Polysaccharide Biosynthesis	\$267,319	Principal Investigator (PI): Troutman, Jerry	Chemistry	Sponsor: National Institutes of Health (NIH)
Integration of NCROEP Projects Towards a Hybrid MHK System at Jennettes Pier	\$4,222	Principal Investigator (PI): Williams, Wesley	Engineering Technology and Construction Management	Sponsor: UNC Coastal Studies Institute (UNC-CSI)
Lung Diseases Among Coal Miners	\$6,499	Principal Investigator (PI): Arif, Ahmed	Public Health Sciences	Sponsor: University of Kentucky (UK) Prime Sponsor: DHHS Health Resources and Services Administration (HRSA)
NSF Center for Metamaterials Phase II	\$90,000	Principal Investigator (PI): Aggarwal, Ishwar Co-PI: Hofmann, Tino	Physics and Optical Science	Sponsor: NSF Directorate for Engineering (ENG)
Performance Testing of an Integrated Magnetic Power Take-Off: DOE Cost Share	\$18,766	Principal Investigator (PI): Williams, Wesley	Engineering Technology and Construction Management	Sponsor: UNC Coastal Studies Institute (UNC-CSI)
Phase II CfM Industry Membership Funds	\$115,000	Principal Investigator (PI): Aggarwal, Ishwar	Physics and Optical Science	Sponsor: All Other Business and Industry

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Predictive Highway Maintenance Through Automated Visual Analytics and Hotspot Analysis.	\$153,614	Principal Investigator (PI): Shoghli, Omidreza Co-PI: Tabkhivayghan, Hamed	Engineering Technology and Construction Management	Sponsor: Leidos Holdings, Inc. Prime Sponsor: Virginia Department of Transportation
Replication of "Valuing Diversity: A Group-Value Approach to Understanding the Importance of Organizational Efforts to Support Diversity"	\$8,998	Principal Investigator (PI): Banks, George	Management	Sponsor: Center for Open Science Prime Sponsor: DOD Defense Advanced Research Projects Agency (DARPA)
RESEARCH-PGR: Systems Analysis of Tomato Pollen Tube Heat Stress Tolerance	\$156,702	Principal Investigator (PI): Loraine, Ann	Bioinformatics and Genomics	Sponsor: Brown University Prime Sponsor: National Science Foundation (NSF)
Retooling Veterans with Service- and Combat-Connected Disabilities in Advanced Virtual Engineering	\$250,000	Principal Investigator (PI): Uddin, Mesbah Co-PIs: Cherukuri, Harischandra; Dahlberg, Jerry	Mechanical Engineering and Engineering Science	Sponsor: DOD Department of Navy (DN) Office of Naval Research (ONR)
Student Health Emergency Mini Grant in Response to the COVID-19 Pandemic	\$7,014	Principal Investigator (PI): Keeton, Paula	Counseling & Psychological Center	Sponsor: University of North Carolina System Office (UNC SysOff) Prime Sponsor: Blue Cross Blue Shield of North Carolina Foundation (BCBSNCF)
The Association of Occupation with Mental Illnesses and Death by Suicide	\$45,976	Principal Investigator (PI): Arif, Ahmed	Public Health Sciences	Sponsor: University of Kentucky (UK) Prime Sponsor: DHHS Health Resources and Services Administration (HRSA)

Award Title	Amount	Investigators	PI Dept.	Sponsors
The Vaginal Microbiome and Racial Disparity in Preterm Delivery	\$161,383	Principal Investigator (PI): Fodor, Anthony	Bioinformatics and Genomics	Sponsor: University of North Carolina at Chapel Hill (UNC-CH) Prime Sponsor: National Institutes of Health (NIH)
USE OF ORGANOSILANES TO MITIGATE THE IMPACT OF FREEZE-THAW DAMAGE TO THE GRANULAR ROADWAYS IN IOWA	\$90,259	Principal Investigator (PI): Daniels, John	Civil and Environmental Engineering	Sponsor: Michigan State University (MSU) Prime Sponsor: Iowa Department of Transportation
What Feeds Firestorms of Emotion? Emotion Regulation, Emotion Contagion, and Collective Behavior in Socio-Political Events	\$3,900	Principal Investigator (PI): Levens, Sara	Psychological Science	Sponsor: DOD Department of Army (DA) Army Research Office (ARO)