February 16, 2018

The Office of Research and Economic Development is pleased to announce awards received by UNC Charlotte Researchers in the month of January, 2018.

Total amount awarded for the month of January was \$2,089,517

Fiscal Year To Date Total: \$26,644,332

Award Title	Amount	Investigators	PI Dept.	Sponsors
9th Annual NASA Robotic Mining Competition - Senior Design Grant	\$3,000	Principal Investigator (PI): Browne, Aidan	Engineering Technology and Construction Management	Sponsor: North Carolina Space Grant Consortium (NC Space Grant) Prime Sponsor: National Aeronautics and Space Administration (NASA)
9th Annual NASA Robotic Mining Competition - Team Competition Grant	\$5,000	Principal Investigator (PI): Browne, Aidan	Engineering Technology and Construction Management	Sponsor: North Carolina Space Grant Consortium (NC Space Grant) Prime Sponsor: National Aeronautics and Space Administration (NASA)
A 3D human neural cell culture system for studying neuron- microglia interaction in Alzheimer's disease	\$150,000	Principal Investigator (PI): Cho, Hansang	Mechanical Engineering and Engineering Science	Sponsor: Cure Alzheimer's Fund
Biophilic Architecture: Sustainable Materialization of Microalgae Facades	\$29,999	Principal Investigator (PI): Kim, Kyoung-Hee	School of Architecture	Sponsor: American Institute of Architects (AIA)
Changing How People Think and Feel about Cancer Prevention Behaviors: Translating Neuroscience into Population Health	\$34,887	Principal Investigator (PI): Levens, Sara	Psychological Science	Sponsor: Cancer Research UK
Community Engagement Scholarship for FNP Students	\$2,000	Principal Investigator (PI): Langford, David Co-PI: Anderson, Heather	School of Nursing	Sponsor: CVS Health Foundation
Correlative study of defects in semiconductors	\$351,633	Principal Investigator (PI): Zhang, Yong	Electrical and Computer Engineering	Sponsor: Department of Defense (DOD) Department of the Army (DA) Army Research Office (ARO)

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CRII: SaTC: Hardware based Authentication and Trusted Platform Module functions (HAT) for IoTs (GRANT TRANSFER)	\$137,245	Principal Investigator (PI): Saqib, Fareena	Electrical and Computer Engineering	Sponsor: National Science Foundation (NSF)
CyPhy: Cyber-Secure Physical Layer Security in Millimeter Wave Communications	\$49,999	Principal Investigator (PI): Wang, Pu	Computer Science	Sponsor: Idaho National Laboratory (INL) Prime Sponsor: Department of Energy (DOE)
Design and Estimation of Port Choice Models in Support of Transportation Infrastructure Investment in the Southern African Cone	\$75,495	Principal Investigator (PI): Thill, Jean-Claude	Geography and Earth Sciences	Sponsor: World Bank Group
EDU: Collaborative: HACE Lab: An Online Hardware Security Attack and Countermeasure Evaluation Lab (GRANT TRANSFER)	\$74,559	Principal Investigator (PI): Saqib, Fareena	Electrical and Computer Engineering	Sponsor: National Science Foundation (NSF)
EPIC Affiliates Industry Memberships for seed funded projects.	\$178,571	Principal Investigator (PI): Kopitopoulou, Christina	Energy Production and Infrastructure Center	Sponsor: Energy Production and Infrastructure Center (EPIC) Affiliates Industry Members
Erasmus+	\$1,957	Principal Investigator (PI): Salas, Spencer	Middle, Secondary and K-12 Education	Sponsor: European Union
Forty-Niner High Power Rocketry Club Student Launch Initiative Proposal	\$5,000	Principal Investigator (PI): Vermillion, Christopher Co-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)
Globally convergent inverse algorithms via Carleman Weight Functions: theory, numerical studies and experimental verifications	\$67,874	Principal Investigator (PI): Klibanov, Michael Co-PIs: Kolesov, Aleksandr; Liu, Hui; Nguyen, Loc; Koshev, Nikolay	Mathematics and Statistics	Sponsor: Department of Defense (DOD) Department of the Army (DA) Army Research Laboratory (ARL)

Award Title	Amount	Investigators	PI Dept.	Sponsors
Graduate Assistantship with Global Alliance for Behavioral Health and Social Justice	\$22,167	Principal Investigator (PI): Kilmer, Ryan Co-PI: Gil-Rivas, Virginia	Psychological Science	Sponsor: American Orthopsychiatric Association (AOA)
Hospitalization as a Predictor of Mortality in Pulmonary Arterial Hypertension	\$97,922	Principal Investigator (PI): Blanchette, Christopher Co-PIs: Noone, Joshua; Howden, Reuben	Deans Office College of Health and Human Services	Sponsor: United Therapeutics Corporation
Identification of Varieties Resistant to Soybean Cyst Nematode Race2	\$13,142	Principal Investigator (PI): Song, Bao-Hua	Biological Sciences	Sponsor: North Carolina Soybean Producers Association (NCSPA)
Increasing Distribution System Resiliency using Flexible DER and Microgrid Assets Enabled by OpenFMB	\$159,000	Principal Investigator (PI): Manjrekar, Madhav Co-PI: Essakiappan, Somasundaram	Electrical and Computer Engineering	Sponsor: Department of Energy (DOE) Pacific Northwest National Laboratory (PNNL) Prime Sponsor: Department of Energy (DOE)
Mecklenburg County Public Service Fellowship	\$9,655	Principal Investigator (PI): Barth, Thomas	Political Science and Public Administration	Sponsor: Charlotte-Mecklenburg County Government
NC Space Grant Higher Education Program FY2017-18 Senior Design Project	\$3,000	Principal Investigator (PI): Vermillion, Christopher Co-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)
Optimization of BioProcessing for Dry Preservation of GVs	\$75,500	Principal Investigator (PI): Elliott, Gloria	Mechanical Engineering and Engineering Science	Sponsor: Smithsonian Institution (SI) Prime Sponsor: National Institutes of Health (NIH)
Regional EC Education Consultant and State Performance Plan Consultant	\$6,249	Principal Investigator (PI): Anderson, Kelly	Special Education and Child Development	Sponsor: North Carolina Department of Public Instruction (NCDPI) Prime Sponsor: US Department of Education (DOED)

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SoutheastCon 2018 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)
Statistical Methods in HIV Vaccine Efficacy Trials	\$5,773	Principal Investigator (PI): Sun, Yanqing	Mathematics and Statistics	Sponsor: Fred Hutchinson Cancer Research Center Prime Sponsor: National Institutes of Health (NIH) National Institute of Allergy and Infectious Diseases (NIAID)
Support of the graduate student working on P2EP knowledgebase and continuity project.	\$7,518	Principal Investigator (PI): Brouwer, Cory	Bioinformatics and Genomics	Sponsor: North Carolina State University (NCSU) Prime Sponsor: Industry Membership in Plant Pathways Elucidation Project Consortium (P2EP)
The Effect of Housing Status on Educational Outcomes and Childhood Well-being	\$26,500	Principal Investigator (PI): Lane, Justin Co-PI: Gavarkavich, Diane	Urban Institute	Sponsor: Habitat for Humanity Charlotte
Visual Analytics on the spread of Pathogens	\$156,009	Principal Investigator (PI): Janies, Daniel	Bioinformatics and Genomics	Sponsor: Ohio State University College of Medicine Prime Sponsor: Department of Defense (DOD) Defense Threat Reduction Agency (DTRA)
Vocal Accommodation Within Nonverbal Frequencies as a Marker of Status, Dominance, and Prestige	\$50,000	Principal Investigator (PI): Dippong, Joseph	Sociology	Sponsor: Department of Defense (DOD) Department of the Army (DA) Army Research Office (ARO)
Wetland and Stream Predictive Model Improvements	\$284,863	Principal Investigator (PI): Wang, Sheng-Guo	Engineering Technology and Construction Management	Sponsor: North Carolina Department of Transportation (NCDOT)