

March 23, 2018

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

Total amount awarded for the month of February was \$3,868,950

Fiscal Year To Date Total: \$30,513,282

Award Title	Amount	Investigators	PI Dept.	Sponsors
2018 Cultural Life Assessment-ASC	\$15,850	Principal Investigator (PI): Gaines, Angelique Co-PI: Gavarkavich, Diane	Urban Institute	Sponsor: Arts and Sciences Council
2018 NCSIP IHE Partnership	\$10,000	Principal Investigator (PI): Sacco, Donna	Special Education and Child Development	Sponsor: North Carolina State Board of Education Prime Sponsor: US Department of Education (DOED)
Affordable Machining of Compliant Components Using Physics-Based Simulation Tools and Strategies (BA-21)	\$64,601	Principal Investigator (PI): Schmitz, Tony	Mechanical Engineering and Engineering Science	Sponsor: The Boeing Company Prime Sponsor: Department of Defense (DOD) Department of the Air Force (DAF) Air Force Material Command (AFMC)
An Interactive Technology Enhanced Coaching Intervention for Black Women with Hypertension	\$149,541	Principal Investigator (PI): Abel, Willie	School of Nursing	Sponsor: National Institutes of Health (NIH)
Arcless Regulator via PE Current Steering	\$100,000	Principal Investigator (PI): Zhao, Tiefu	Electrical and Computer Engineering	Sponsor: Eaton Corporation
Center for Gastrointestinal Biology and Disease	\$20,973	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)
CFD Aided Exhaust System Design	\$33,526	Principal Investigator (PI): Uddin, Mesbah	Mechanical Engineering and Engineering Science	Sponsor: Forsite Development, Inc.
Charlotte Math Teachers' Circle	\$2,000	Principal Investigator (PI): Hahn, Allison	Mathematics and Statistics	Sponsor: American Institute of Mathematics

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Collaborative Research: Biomineralization processes and their environmental modulation in marine bivalves	\$133,663	Principal Investigator (PI): Ivanina, Anna Co-PIs: Reitzel, Adam; Sokolova, Inna	Biological Sciences	Sponsor: National Science Foundation (NSF)
Collaborative Research: DAPPR: Diffusion Analytics for Public Policy Research	\$73,154	Principal Investigator (PI): Windett, Jason	Political Science and Public Administration	Sponsor: National Science Foundation (NSF)
Communication Bridge between Dispatch Controller and Fuel Cell Integrated Building System	\$50,000	Principal Investigator (PI): Wang, Weimin	Engineering Technology and Construction Management	Sponsor: Battelle Pacific Northwest Laboratories
Comparative Genomics of Plasmodium vivax: Insights into Duffy Negative Erythrocyte Invasion	\$432,702	Principal Investigator (PI): Lo, Eugenia	Biological Sciences	Sponsor: National Institutes of Health (NIH)
Computational Model for Spacecraft/Habitat Volume	\$35,000	Principal Investigator (PI): Hsiang, Simon Co-PI: Lim, Churlzu	Systems Engineering and Engineering Management	Sponsor: National Aeronautics and Space Administration (NASA) Johnson Space Center
DEveloping Landscape Ecotoxicology in Terrestrial Ecosystems (DELETE): Pesticide Exposure and Effects on Bees	\$15,000	Principal Investigator (PI): Shin, Min	Computer Science	Sponsor: Lund University Prime Sponsor: Swedish Research Council (SRC)
Duke Energy SOW 18 - Typhoon Modeling and Analysis of the Rankin Feeder and Associated Resources	\$99,994	Principal Investigator (PI): Cecchi, Valentina Co-PIs: Manjrekar, Madhav; Essakiappan, Somasundaram	Electrical and Computer Engineering	Sponsor: Duke Energy Corporation
EARS: Collaborative Research: Â Maximizing Spatio-Temporal Spectrum Efficiency in the Cloud	\$160,185	Principal Investigator (PI): Wang, Pu	Computer Science	Sponsor: National Science Foundation (NSF)
EPIC Affiliates Industry Memberships for seed funded projects.	\$57,465	Principal Investigator (PI): Kopitopoulou, Christina	Energy Production and Infrastructure Center	Sponsor: Energy Production and Infrastructure Center (EPIC) Affiliates Industry Members
Excitons and exciton-polaritons in novel organic-inorganic hybrids with sub-nano inorganic layers	\$135,000	Principal Investigator (PI): Zhang, Yong Co-PI: Schmedake, Thomas	Electrical and Computer Engineering	Sponsor: Department of Defense (DOD) Department of the Army (DA) Army Research Office (ARO)

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Freeform Replication on a Toroidal Substrate	\$41,839	Principal Investigator (PI): Davies, Matthew Co-PIs: Owen, Joseph; Suleski, Thomas;	Mechanical Engineering and Engineering Science	Sponsor: University of Rochester Prime Sponsor: All Other Business and Industry
Full Scale Testing Program for Tindall Slab System	\$96,383	Principal Investigator (PI): Braxtan, Nicole Co-PIs: Tempest, Brett; Whelan, Matthew	Civil and Environmental Engineering	Sponsor: Tindall Corporation
GTS Composite Flywheel Energy Storage Systems Support for Laboratory Tests and Demonstrations	\$144,819	Principal Investigator (PI): Baez-Rivera, Yamilka Co-PIs: Young, David; Mazzola, Michael; Kamalasadan, Sukumar	Energy Production and Infrastructure Center	Sponsor: Global Technical Systems
Impact of microbiota-mediated biotransformation of black tea polyphenols on GI health	\$55,296	Principal Investigator (PI): Fodor, Anthony	Bioinformatics and Genomics	Sponsor: University of Florida Prime Sponsor: National Institutes of Health (NIH)
Interannual variation in fruit availability for white-handed gibbons (<i>Hylobates lar</i>) living in suboptimal habitat in western Thailand	\$2,000	Principal Investigator (PI): Light, Lydia	Anthropology	Sponsor: American Society of Primatologists (ASP)
KIPP Durham Charter School TIMS Computerized Bus Routing Project 2018-19	\$2,700	Principal Investigator (PI): Pressley, JoAnne	Urban Institute	Sponsor: KIPP Durham College Prep Public School
Mechanism by which H2S-producing bacteria influence development of colorectal cancer.	\$20,000	Principal Investigator (PI): Fodor, Anthony	Bioinformatics and Genomics	Sponsor: University of Florida Prime Sponsor: National Institutes of Health (NIH)
Mechanism of APE1 in DNA damage response	\$341,830	Principal Investigator (PI): Yan, Shan Co-PIs: Richardson, Christine; Mukherjee, Pinku; Lin, Yunfeng	Biological Sciences	Sponsor: National Institutes of Health (NIH)

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MSF Errors: Effects and Specifications for Freeform Optics	\$52,816	Principal Investigator (PI): Suleski, Thomas	Physics and Optical Science	Sponsor: University of Rochester Prime Sponsor: National Science Foundation (NSF)
Operating FLEX engines on other than ULS fuel	\$78,662	Principal Investigator (PI): Uddin, Mesbah	Mechanical Engineering and Engineering Science	Sponsor: Electric Power Research Institute (EPRI)
Phase II IUCRC UNC Charlotte Site: Center for Visual and Decision Informatics (CVDI)	\$102,163	Principal Investigator (PI): Hadzikadic, Mirsad Co-PIs: Thill, Jean-Claude; Shehab, Mohamed; Dou, Wenwen; Ras, Zbigniew	Software and Information Systems	Sponsor: National Science Foundation (NSF)
Priming Gender-based Status Beliefs: Self-Relevance, Stereotypes, and Schemas	\$150,000	Principal Investigator (PI): Dippong, Joseph	Sociology	Sponsor: National Science Foundation (NSF)
Process chains for cost effective production of glass freeform optics	\$56,217	Principal Investigator (PI): Davies, Matthew Co-PIs: Owen, Joseph; Suleski, Thomas;	Mechanical Engineering and Engineering Science	Sponsor: University of Rochester Prime Sponsor: All Other Business and Industry
RAPID: Investigation of Power Grid Failure After Hurricanes Irma and Maria	\$72,420	Principal Investigator (PI): Chen, Shen-En Co-PIs: Manjrekar, Madhav; Pando, Miguel; Baez-Rivera, Yamilka	Civil and Environmental Engineering	Sponsor: National Science Foundation (NSF)
REU Site: Making Future Communities: Infrastructure and Interaction Design for Cyber-Physical Systems	\$323,997	Principal Investigator (PI): Wilson, David Co-PIs: Rorrer, Audrey; Lipford, Heather	Software and Information Systems	Sponsor: National Science Foundation (NSF)
Role of DAI in viral CNS infection: A pilot study	\$67,950	Principal Investigator (PI): Marriott, Ian Co-PI: Johnson, Morgan	Biological Sciences	Sponsor: National Institutes of Health (NIH)

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SBA Carry Forward - Summer Internship	\$15,000	Principal Investigator (PI): McAllister, George	Small Business Technology Development Center (SBTDC)	Sponsor: North Carolina Small Business and Technology Development Center (NC SBTDC) Prime Sponsor: US Small Business Administration (SBA)
SBA Federal SBTDC Budget for the 2017 Program Year	\$2,580	Principal Investigator (PI): McAllister, George	Small Business Technology Development Center (SBTDC)	Sponsor: North Carolina Small Business and Technology Development Center (NC SBTDC) Prime Sponsor: US Small Business Administration (SBA)
SBA Federal SBTDC Budget for the 2017 Program Year	\$70,982	Principal Investigator (PI): McIntire, Robin	Small Business Technology Development Center (SBTDC)	Sponsor: North Carolina Small Business and Technology Development Center (NC SBTDC) Prime Sponsor: US Small Business Administration (SBA)
SBIR: Reiterative Phase Filter Design and Manufacturability Study.	\$30,112	Principal Investigator (PI): Poutous, Menelaos	Physics and Optical Science	Sponsor: NuSpot Technologies, LLC Prime Sponsor: Department of Defense (DOD) Defense Advanced Research Projects Agency (DARPA)
STARS Alliance ECEP Subcontract through Georgia Tech	\$36,710	Principal Investigator (PI): Payton, Jamie	Computer Science	Sponsor: Georgia Institute of Technology
The Impact of Childhood Nutrition Assistance on Child Health and Well-Being: Lessons from WIC and the School Breakfast and Lunch Programs	\$55,997	Principal Investigator (PI): Schulkind, Lisa	Economics	Sponsor: University of California at Davis (UCD) Prime Sponsor: Robert Wood Johnson Foundation (RWJF)
The TIES Center: Increasing Time, Instructional Effectiveness, Engagement, and State Support for Inclusive Practices for Students with Significant Cognitive Disabilities	\$357,914	Principal Investigator (PI): Wakeman, Shawnee Co-PIs: Collins, Belva; Flowers, Claudia	Special Education and Child Development	Sponsor: University of Minnesota Prime Sponsor: US Department of Education (DOED)

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Varifunction Freeform Optics	\$52,501	Principal Investigator (PI): Suleski, Thomas Co-PI: Davies, Matthew	Physics and Optical Science	Sponsor: University of Rochester
Workshop on Research Needs in Machining and Machine Tools	\$49,408	Principal Investigator (PI): Smith, Kevin Co-PI: Schmitz, Tony	Mechanical Engineering and Engineering Science	Sponsor: National Science Foundation (NSF)