

June 27, 2017

The Office of Research and Economic Development is pleased to announce awards received by UNC Charlotte Researchers in the month of May, 2017.

Total amount awarded for the month of May was \$3,059,747

Fiscal Year To Date Total: \$44,504,018

<b>Award Title</b>	<b>Amount</b>	<b>Investigators</b>	<b>PI Dept.</b>	<b>Sponsors</b>
<b>"Black Enchantress": Hannah Elias, Interracial Sex, Murder, and Civil Rights in Jim Crow New York</b>	\$50,000	<b>Principal Investigator (PI):</b> Hicks, Cheryl	History	<b>Sponsor:</b> Library Company of Philadelphia <b>Prime Sponsor:</b> Andrew W Mellon Foundation
<b>2017 Freedom School Assessment Project</b>	\$46,140	<b>Principal Investigator (PI):</b> Taylor, David	Reading and Elementary Education	<b>Sponsor:</b> Freedom School Partners
<b>2018 International Symposium on Experimental Robotics</b>	\$25,000	<b>Principal Investigator (PI):</b> Xiao, Jing	Computer Science	<b>Sponsor:</b> International Foundation of Robotics Research
<b>Affordable Machining of Compliant Components Using Physics-Based Simulation Tools and Strategies (BA-21)</b>	\$120,731	<b>Principal Investigator (PI):</b> Schmitz, Tony	Mechanical Engineering and Engineering Science	<b>Sponsor:</b> The Boeing Company
<b>Applied spectral problems in population dynamics, bio-physics and physical chemistry</b>	\$76,013	<b>Principal Investigator (PI):</b> Molchanov, Stanislav <b>Co-PI:</b> Vainberg, Boris	Mathematics and Statistics	<b>Sponsor:</b> National Science Foundation (NSF)
<b>Building Tandem Mass Spectrometry Libraries Using Hybrid Search</b>	\$28,426	<b>Principal Investigator (PI):</b> Cooper, Brian	Chemistry	<b>Sponsor:</b> Department of Commerce (DOC) National Institute of Standards and Technology (NIST)
<b>CAPER PD-1 Critical Infrastructure Resilience of the Distribution Grid</b>	\$32,500	<b>Principal Investigator (PI):</b> Chowdhury, Badrul <b>Co-PI:</b> Lim, Churlzu	Electrical and Computer Engineering	<b>Sponsor:</b> Clemson University <b>Prime Sponsor:</b> Savannah River Nuclear Solutions
<b>Congress and the Military-Industrial Complex, 1950s-1990s</b>	\$500	<b>Principal Investigator (PI):</b> Wilson, Mark	History	<b>Sponsor:</b> Association of Centers for the Study of Congress (ACSC)

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<b>Demonstrate Feasibility of Encapsulation Technology to Sequester Halides from Concentrated FGD Purge Streams: Bromide Sequestration Field Pilot Demonstration Testing</b>	\$645,195	<b>Principal Investigator (PI):</b> Ogunro, Vincent <b>Co-PIs:</b> Khire, Milind; Langley, William	Civil and Environmental Engineering	<b>Sponsor:</b> Duke Energy Corporation
<b>Durable and Sustainable Concrete Through Performance-Engineered Concrete Mixtures</b>	\$280,025	<b>Principal Investigator (PI):</b> Cavalline, Tara <b>Co-PI:</b> Tempest, Brett	Engineering Technology and Construction Management	<b>Sponsor:</b> North Carolina Department of Transportation (NCDOT) <b>Prime Sponsor:</b> Federal Highway Administration (FHWA)
<b>Effects of Torsion and Moment on Traffic Signal Structures' Foundations in Coastal Conditions</b>	\$288,596	<b>Principal Investigator (PI):</b> Pando, Miguel <b>Co-PIs:</b> Weggel, David; Fang, Hongbing; Whelan, Matthew	Civil and Environmental Engineering	<b>Sponsor:</b> North Carolina Department of Transportation (NCDOT) <b>Prime Sponsor:</b> Federal Highway Administration (FHWA)
<b>Emotion Regulation, Attitudes, and Activism in Extraordinary Times</b>	\$168,397	<b>Principal Investigator (PI):</b> Maestas, Cherie <b>Co-PI:</b> Levens, Sara	Political Science and Public Administration	<b>Sponsor:</b> National Science Foundation (NSF)
<b>Evaluate combination of MUC1 vaccines with cyclophosphamide and checkpoint inhibitors in syngeneic murine model of cancer</b>	\$35,628	<b>Principal Investigator (PI):</b> Mukherjee, Pinku	Biological Sciences	<b>Sponsor:</b> ViaMune, Inc.
<b>Evaluating the Impact of Outward Bound School Unity Project on Post-Secondary Outcomes</b>	\$38,000	<b>Principal Investigator (PI):</b> Lane, Justin <b>Co-PI:</b> Gavarkavich, Diane	Urban Institute	<b>Sponsor:</b> North Carolina Outward Bound School
<b>GIS Internship Supporting Real Estate Development in Charlotte, NC</b>	\$6,972	<b>Principal Investigator (PI):</b> Clinton, Sandra	Geography and Earth Sciences	<b>Sponsor:</b> Leon Capital Group
<b>Graduate Assistantship with Communities in Schools</b>	\$8,344	<b>Principal Investigator (PI):</b> Cook, James <b>Co-PI:</b> Kilmer, Ryan	Psychological Science	<b>Sponsor:</b> Communities In Schools (CIS) of Charlotte-Mecklenburg, Inc.

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<b>Impact of microbiota-mediated biotransformation of black tea polyphenols on GI health</b>	\$32,941	<b>Principal Investigator (PI):</b> Fodor, Anthony	Bioinformatics and Genomics	<b>Sponsor:</b> University of Florida <b>Prime Sponsor:</b> National Institutes of Health (NIH)
<b>Industrial membership fees for the UNC Charlotte Site of I/UCRC Robots and Sensors for the Human Well-being</b>	\$70,000	<b>Principal Investigator (PI):</b> Xiao, Jing	Computer Science	<b>Sponsor:</b> All Other Business and Industry
<b>Industrial membership fees for the UNC Charlotte Site of I/UCRC Robots and Sensors for the Human Well-being</b>	\$83,740	<b>Principal Investigator (PI):</b> Xiao, Jing	Computer Science	<b>Sponsor:</b> All Other Business and Industry
<b>International Facility Management Association Operations and Maintenance Report</b>	\$11,075	<b>Principal Investigator (PI):</b> Smithwick, Jake	Engineering Technology and Construction Management	<b>Sponsor:</b> International Facility Management Association (IFMA)
<b>Investigating the Performance of a Magnetically Geared Hydropower Generator</b>	\$18,000	<b>Principal Investigator (PI):</b> Kakad, Yogendra	Electrical and Computer Engineering	<b>Sponsor:</b> Hydro Research Foundation, Inc. (HRF) <b>Prime Sponsor:</b> Department of Energy (DOE)
<b>Investigating the Performance of a Magnetically Geared Hydropower Generator</b>	\$10,000	<b>Principal Investigator (PI):</b> Kakad, Yogendra	Electrical and Computer Engineering	<b>Sponsor:</b> Hydro Research Foundation, Inc. (HRF) <b>Prime Sponsor:</b> Department of Energy (DOE)
<b>Invitational Leadership Institute Grant</b>	\$15,000	<b>Principal Investigator (PI):</b> Coffey, Heather	Middle, Secondary and K-12 Education	<b>Sponsor:</b> National Writing Project (NWP) <b>Prime Sponsor:</b> US Department of Education (DOED)
<b>Joy Charter School TIMS Computerized Bus Routing Project 2017-18</b>	\$2,700	<b>Principal Investigator (PI):</b> Pressley, JoAnne	Urban Institute	<b>Sponsor:</b> Maureen Joy Charter School

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<b>Leveraging Industry Research to Educate a Future Electric Grid Workforce</b>	\$301,660	<b>Principal Investigator (PI):</b> Chowdhury, Badrul <b>Co-PIs:</b> Parkhideh, Babak; Enslin, Johan; Noras, Maciej; Manjrekar, Madhav; Cox, Robert; Cecchi, Valentina; Salami, Zia	Electrical and Computer Engineering	<b>Sponsor:</b> Electric Power Research Institute (EPRI) <b>Prime Sponsor:</b> Department of Energy (DOE)
<b>Manpower and Efficiency Study of the Manns Harbor Shipyard</b>	\$79,465	<b>Principal Investigator (PI):</b> Mayo, Glenda	Engineering Technology and Construction Management	<b>Sponsor:</b> North Carolina Department of Transportation (NCDOT) <b>Prime Sponsor:</b> Federal Highway Administration (FHWA)
<b>Microbial Endocrinology as a Mechanism Governing Stress-Induced Microbiome-Gut-Brain Communication</b>	\$9,639	<b>Principal Investigator (PI):</b> Fodor, Anthony	Bioinformatics and Genomics	<b>Sponsor:</b> Iowa State University <b>Prime Sponsor:</b> Department of Defense (DOD) Department of the Navy (DN) Office of Naval Research (ONR)
<b>NIST Summer Undergraduate Research Fellowship Program Application - MEES Student: Jonathan Piland</b>	\$9,370	<b>Principal Investigator (PI):</b> Smith, Stuart	Mechanical Engineering and Engineering Science	<b>Sponsor:</b> Department of Commerce (DOC) National Institute of Standards and Technology (NIST)
<b>NSF Center for Metamaterials Phase II</b>	\$45,000	<b>Principal Investigator (PI):</b> Aggarwal, Ishwar	Physics and Optical Science	<b>Sponsor:</b> National Science Foundation (NSF)
<b>NSF Student Travel Grant for the 2017 Symposium on Usable Privacy and Security (SOUPS)</b>	\$18,000	<b>Principal Investigator (PI):</b> Lipford, Heather	Software and Information Systems	<b>Sponsor:</b> National Science Foundation (NSF)
<b>Pathogen Modeling Tool</b>	\$1,001	<b>Principal Investigator (PI):</b> Janies, Daniel	Bioinformatics and Genomics	<b>Sponsor:</b> Oak Ridge Associated Universities (ORAU)
<b>Product Evaluation Tracking Tools and Product Categories</b>	\$93,480	<b>Principal Investigator (PI):</b> Smithwick, Jake <b>Co-PI:</b> Mayo, Glenda	Engineering Technology and Construction Management	<b>Sponsor:</b> North Carolina Department of Transportation (NCDOT) <b>Prime Sponsor:</b> Federal Highway Administration (FHWA)

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<b>PTAC - DLA 2017-2018</b>	\$88,970	<b>Principal Investigator (PI):</b> McAllister, George <b>Co-PIs:</b>	Small Business Technology Development Center (SBTDC)	<b>Sponsor:</b> NC Small Business Technology Devel Council <b>Prime Sponsor:</b> Department of Defense (DOD) Defense Logistics Agency
<b>Reducing Obesity in African American Women through Lifestyle Enhancement</b>	\$1,500	<b>Principal Investigator (PI):</b> DeHaven, Mark	Public Health Sciences	<b>Sponsor:</b> University of North Texas Health Science Center at Forth Worth <b>Prime Sponsor:</b> NIH National Center on Minority Health and Health Disparities (NCMHD)
<b>Risk Assessment of Roadside Utility Structures under Vehicular Impacts</b>	\$168,122	<b>Principal Investigator (PI):</b> Fang, Hongbing	Mechanical Engineering and Engineering Science	<b>Sponsor:</b> North Carolina Department of Transportation (NCDOT)
<b>SBA Carry Forward - Summer Internship</b>	\$37,893	<b>Principal Investigator (PI):</b> McAllister, George	Small Business Technology Development Center (SBTDC)	<b>Sponsor:</b> North Carolina Small Business and Technology Development Center (NC SBTDC) <b>Prime Sponsor:</b> US Small Business Administration (SBA)
<b>Structured Diamond Optics for High Power Lasers (year 3)</b>	\$94,989	<b>Principal Investigator (PI):</b> Suleski, Thomas	Physics and Optical Science	<b>Sponsor:</b> II-VI Foundation
<b>The Vaginal Microbiome and Racial Disparity in Preterm Delivery</b>	\$10,735	<b>Principal Investigator (PI):</b> Fodor, Anthony	Bioinformatics and Genomics	<b>Sponsor:</b> University of North Carolina at Chapel Hill (UNC-CH) <b>Prime Sponsor:</b> National Institutes of Health (NIH)
<b>Thulium Fiber Laser Lithotripsy</b>	\$6,000	<b>Principal Investigator (PI):</b> Fried, Nathaniel <b>Co-PI:</b> Hardy, Luke	Physics and Optical Science	<b>Sponsor:</b> Carolinas HealthCare System