

October 4, 2016

The Office of Research and Economic Development is pleased to announce awards received by UNC Charlotte Researchers in the month of August, 2016.

*Total amount awarded for the month of August was \$8,680,328*

*Fiscal Year To Date Total: \$13,229,797*

<b>Award Title</b>	<b>Amount</b>	<b>Investigators</b>	<b>PI Dept.</b>	<b>Sponsors</b>
<b>2016-2017 Programmatic Initiatives Support</b>	\$12,000	<b>Principal Investigator (PI):</b> Lewis, Chance	Middle, Secondary and K-12 Education	<b>Sponsor:</b> TresSports Interagency Collaborative (TIC)
<b>A 3D human neural cell culture system for studying neuron-microglia interaction in Alzheimer's disease</b>	\$150,000	<b>Principal Investigator (PI):</b> Cho, Hansang	Mechanical Engineering and Engineering Science	<b>Sponsor:</b> Massachusetts General Hospital <b>Prime Sponsor:</b> Cure Alzheimer's Fund
<b>Acquisition of Multi-functional Nanoprobe Station-based Measurement System for Comprehensive in situ Materials Characterization and Measurement in SEM</b>	\$483,339	<b>Principal Investigator (PI):</b> Zhang, HaiTao <b>Co-PIs:</b> Fiddy, Michael; Wei, Qiuming; Zhang, Yong	Mechanical Engineering and Engineering Science	<b>Sponsor:</b> Department of Defense (DOD)
<b>CABARRUS STARS - Minority Youth Violence Prevention: Integrating Public Health and Community Policing Approaches</b>	\$30,000	<b>Principal Investigator (PI):</b> Turner, Michael	Criminal Justice and Criminology	<b>Sponsor:</b> Cabarrus Health Alliance <b>Prime Sponsor:</b> Department of Health and Human Services (DHHS)
<b>CeFO IUCRC : A Deflectometry System with a Form Measurement You Can Trust</b>	\$14,034	<b>Principal Investigator (PI):</b> Davies, Angela <b>Co-PI:</b> Evans, Christopher	Physics and Optical Science	<b>Sponsor:</b> University of Rochester <b>Prime Sponsor:</b> National Science Foundation (NSF)
<b>CIF21DIBBS: EI: VIFI:Virtual Information-Fabric Infrastructure (VIFI) for Data-Driven Decisions from Distributed Data</b>	\$3,999,531	<b>Principal Investigator (PI):</b> Talukder, Ashit <b>Co-PIs:</b> Al-Shaer, Ehab; Hadzikadic, Mirsad; Dou, Wenwen; Tolone, William; Zadrozny, Wlodek; Wang, Yongge	Computer Science	<b>Sponsor:</b> National Science Foundation (NSF)
<b>Collaborative Project: Carolina Cyber Defender Scholarship</b>	\$125,050	<b>Principal Investigator (PI):</b> Chu, Bei-Tseng	Software and Information Systems	<b>Sponsor:</b> National Science Foundation (NSF)

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<b>Collaborative Research: ABI Innovation: Towards high performance flexible transcription factor-DNA docking</b>	\$204,340	<b>Principal Investigator (PI):</b> Guo, Jun-tao	Bioinformatics and Genomics	<b>Sponsor:</b> National Science Foundation (NSF)
<b>Collaborative Research: Using Automated Feedback to Promote a Growth Mindset in Programming Assignments</b>	\$150,000	<b>Principal Investigator (PI):</b> Perez Quinones, Manuel <b>Co-PI:</b> Rorrer, Audrey	Deans Office College of Computing and Informatics	<b>Sponsor:</b> National Science Foundation (NSF)
<b>Continued Maintenance and Development of Software: Integrated Genome Browser and the Genoviz SDK, Visualization Software for Next-Generation Genomics</b>	\$373,922	<b>Principal Investigator (PI):</b> Loraine, Ann	Bioinformatics and Genomics	<b>Sponsor:</b> National Institutes of Health (NIH) National Center for Research Resources (NCRR)
<b>Demonstration of a Closed-loop Digitally Enabled Manufacturing Process using Advanced Metrology Techniques</b>	\$133,222	<b>Principal Investigator (PI):</b> Ziegert, John <b>Co-PI:</b> Morse, Edward	Mechanical Engineering and Engineering Science	<b>Sponsor:</b> Siemens Energy
<b>Describing the Social Service Usage of Habitat Charlotte Served Families</b>	\$10,300	<b>Principal Investigator (PI):</b> Lane, Justin	Urban Institute	<b>Sponsor:</b> Habitat for Humanity Charlotte
<b>Design, Analysis, Manufacture, and Testing of a Multistage Magnetic Gearbox</b>	\$50,000	<b>Principal Investigator (PI):</b> Williams, Wesley	Engineering Technology and Construction Management	<b>Sponsor:</b> University of North Carolina Coastal Studies Institute (UNC-CSI)
<b>EDU: Collaborative: Integrating Embedded Systems Security into Computer Engineering and Science Curricula</b>	\$49,999	<b>Principal Investigator (PI):</b> Ramaprasad, Harini	Computer Science	<b>Sponsor:</b> National Science Foundation (NSF)
<b>Effects of Tidally Mediated Hydrology on Biogeochemical Processes in a Bottomland Hardwood Riparian Zone - A Collaborative Research Proposal between the Univ. of North Carolina at Charlotte and the U.S. Forest Service, Southern Research Station</b>	\$6,000	<b>Principal Investigator (PI):</b> Allan, Craig	Geography and Earth Sciences	<b>Sponsor:</b> US Department of Agriculture (USDA) Forest Service Southern Research Station
<b>Environment assisted cracking of graphene</b>	\$237,313	<b>Principal Investigator (PI):</b> Tabarraei, Alireza	Mechanical Engineering and Engineering Science	<b>Sponsor:</b> National Science Foundation (NSF)

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<b>Fabrication of Anti-Reflection Structured Surfaces on variety of Optical Windows, Lenses and Fibers</b>	\$150,000	<b>Principal Investigator (PI):</b> Aggarwal, Ishwar	Physics and Optical Science	<b>Sponsor:</b> Naval Research Laboratory
<b>Graduate Research Assistantship</b>	\$12,567	<b>Principal Investigator (PI):</b> Cecchi, Valentina	Electrical and Computer Engineering	<b>Sponsor:</b> Quanta Technology LLC
<b>Groundwater Modeling for Corrective Action Plans</b>	\$129,541	<b>Principal Investigator (PI):</b> Langley, William <b>Co-PIs:</b> Kim, Dongwook; Daniels, John	Civil and Environmental Engineering	<b>Sponsor:</b> HDR Engineering, Inc of the Carolinas
<b>Healthy Wells</b>	\$4,500	<b>Principal Investigator (PI):</b> Silverman, Gary <b>Co-PIs:</b> Delmelle, Eric; Tang, Wenwu	Public Health Sciences	<b>Sponsor:</b> Gaston County Health Department <b>Prime Sponsor:</b> Centers for Disease Control and Prevention (CDC)
<b>Industrial membership fees for the UNC Charlotte Site of I/UCRC Robots and Sensors for the Human Well-being</b>	\$35,000	<b>Principal Investigator (PI):</b> Xiao, Jing	Computer Science	<b>Sponsor:</b> All Other Business and Industry
<b>Investigation of Mechanical and Electrical Properties of Reactive Foil Joined Copper Conductors</b>	\$11,370	<b>Principal Investigator (PI):</b> Ziegert, John	Mechanical Engineering and Engineering Science	<b>Sponsor:</b> Siemens Energy
<b>Investigation on Circuit Requirements to Enhance the Bandwidth of Point-Field Detectors Used as Current Sensor</b>	\$329,935	<b>Principal Investigator (PI):</b> Parkhideh, Babak	Electrical and Computer Engineering	<b>Sponsor:</b> National Science Foundation (NSF)
<b>IPA- Program Manager for the Advances in Biological Informatics Program in the BIO Division of the National Science Foundation</b>	\$165,395	<b>Principal Investigator (PI):</b> Weller, Jennifer	Bioinformatics and Genomics	<b>Sponsor:</b> National Science Foundation (NSF)
<b>IPA with DARPA to serve as Program Manager in the Defense Sciences Office</b>	\$541,803	<b>Principal Investigator (PI):</b> Fiddy, Michael	Physics and Optical Science	<b>Sponsor:</b> Department of Defense (DOD) Defense Advanced Research Projects Agency (DARPA)

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<b>Materials Characterization Laboratory Services - Master Agreement with Wellman Plastics Recycling, LLC</b>	\$226	<b>Principal Investigator (PI):</b> Weaver, Katherine	Energy Production and Infrastructure Center	<b>Sponsor:</b> Wellman Plastics Recycling (WPR)
<b>Micro-chiseling of Retro-Reflector Arrays Optimization and Exploration of Design Space</b>	\$119,390	<b>Principal Investigator (PI):</b> Owen, Joseph <b>Co-PI:</b> Davies, Matthew	Mechanical Engineering and Engineering Science	<b>Sponsor:</b> ORAFOL Americas
<b>NC Space Grant Affiliate Program - NASA Funding GY2015 (Year 1 of 3)</b>	\$10,000	<b>Principal Investigator (PI):</b> Conrad, James	Electrical and Computer Engineering	<b>Sponsor:</b> North Carolina Space Grant Consortium (NC Space Grant) <b>Prime Sponsor:</b> National Aeronautics and Space Administration (NASA)
<b>NC-LSAMP-Phase V</b>	\$86,000	<b>Principal Investigator (PI):</b> Brown, Banita	Dean's Office College of Liberal Arts and Sciences	<b>Sponsor:</b> North Carolina Agricultural and Technical State University (NCAT ) <b>Prime Sponsor:</b> National Science Foundation (NSF)
<b>Non-Intrusive Load Monitoring for Tracking the Health of Multiple Motors on a Single Electrical Bus</b>	\$31,603	<b>Principal Investigator (PI):</b> Cox, Robert	Electrical and Computer Engineering	<b>Sponsor:</b> Electric Power Research Institute (EPRI)
<b>NSF Center for Metamaterials Phase II</b>	\$45,000	<b>Principal Investigator (PI):</b> Fiddy, Michael	Physics and Optical Science	<b>Sponsor:</b> National Science Foundation (NSF)
<b>Online learning platform for introducing clinicians and researchers to metabolomics</b>	\$8,145	<b>Principal Investigator (PI):</b> Du, Xiuxia	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>Phase II CfM Industry Membership Funds</b>	\$90,000	<b>Principal Investigator (PI):</b> Fiddy, Michael	Physics and Optical Science	<b>Sponsor:</b> All Other Business and Industry
<b>Preventing Aggressive Behavior and Workplace Bullying in Highway Construction: Supervisor Training</b>	\$40,000	<b>Principal Investigator (PI):</b> Bochantin, Jaime	Communication Studies	<b>Sponsor:</b> Oregon Department of Transportation

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<b>Regional EC Education Consultant and State Performance Plan Consultant</b>	\$351,288	<b>Principal Investigator (PI):</b> Anderson, Kelly	Special Education and Child Development	<b>Sponsor:</b> North Carolina Department of Public Instruction (NCDPI) <b>Prime Sponsor:</b> US Department of Education (DOED)
<b>Research on Tire Camber Control for Over-the-Road Trucks</b>	\$18,000	<b>Principal Investigator (PI):</b> Tkacik, Peter	Mechanical Engineering and Engineering Science	<b>Sponsor:</b> Michelin Americas Research Corporation (MARC)
<b>STTR: TAB 004 antibody combined with IL2 as a targeted therapy for pancreatic cancer</b>	\$54,738	<b>Principal Investigator (PI):</b> Dreau, Didier	Biological Sciences	<b>Sponsor:</b> OncoTAB, Inc. <b>Prime Sponsor:</b> National Institutes of Health (NIH)
<b>Study the Cost Effectiveness of an Active Parking Lot Street Sweeping Program to Control Particulate, PAH, Nutrient and Trace Metal Loadings to Stormwater Runoff</b>	\$7,232	<b>Principal Investigator (PI):</b> Allan, Craig	Geography and Earth Sciences	<b>Sponsor:</b> Charlotte-Mecklenburg County Storm Water Services
<b>Submarine Generator for Gulf Stream Hydrokinetic Energy Harvesting</b>	\$27,500	<b>Principal Investigator (PI):</b> Vermillion, Christopher	Mechanical Engineering and Engineering Science	<b>Sponsor:</b> University of North Carolina Coastal Studies Institute (UNC-CSI)
<b>Technical Advisory Services for Southern Company Ash Basin Closure Projects</b>	\$100,000	<b>Principal Investigator (PI):</b> Hardin, Christopher <b>Co-PI:</b> Khire, Milind	Energy Production and Infrastructure Center	<b>Sponsor:</b> Southern Company
<b>Three-Dimensional Optimization of Ocean Current Turbine Arrays</b>	\$100,000	<b>Principal Investigator (PI):</b> Vermillion, Christopher <b>Co-PI:</b> Ramaprabhu, Praveen	Mechanical Engineering and Engineering Science	<b>Sponsor:</b> University of North Carolina Coastal Studies Institute (UNC-CSI)
<b>Town of Davidson Housing Needs Assessment</b>	\$27,000	<b>Principal Investigator (PI):</b> Clark, Ashley <b>Co-PIs:</b> Simmons, Laura; Szczepaniak, Zachary	Urban Institute	<b>Sponsor:</b> Town of Davidson

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<b>TWC: EAGER: Collaborative Research: iPrivacy: Automatic Recommendation of Personalized Privacy Settings for Image Sharing</b>	\$155,045	<b>Principal Investigator (PI):</b> Fan, Jianping	Computer Science	<b>Sponsor:</b> National Science Foundation (NSF)