

October 3, 2017

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

Total amount awarded for the month of August was \$6,571,271

Fiscal Year To Date Total: \$10,482,800

Award Title	Amount	Investigators	PI Dept.	Sponsors
2017-2018 Charlotte-Mecklenburg Quality of Life Study (County)	\$20,000	Principal Investigator (PI): Simmons, Laura Co-PI: Zager, Kathryn	Urban Institute	Sponsor: Mecklenburg County Managers Office
A 3D human neural cell culture system for studying neuron-microglia interaction in Alzheimer's disease	\$2,350	Principal Investigator (PI): Cho, Hansang Co-PI: Park, Joseph	Mechanical Engineering and Engineering Science	Sponsor: Cure Alzheimer's Fund
A Child's Place: End-of-Year Report Technical Assistance and Study of Students Served in 2016-2017	\$9,000	Principal Investigator (PI): Gavarkavich, Diane Co-PIs: Gaines, Angelique; Lane, Justin	Urban Institute	Sponsor: A Child's Place
A Hermetically Sealed Magnetically Geared Marine Hydrokinetic Generator	\$18,333	Principal Investigator (PI): Williams, Wesley	Engineering Technology and Construction Management	Sponsor: UNC Coastal Studies Institute (UNC-CSI)
A Multitude of Voices: The Danger of a Single Story The Memorial Library/Olga Lengyel Institute Summer Satellite Holocaust Teacher Education	\$3,524	Principal Investigator (PI): Wertz-Orbaugh, Tonya	University Writing Programs	Sponsor: Olga Lengyel Institute Memorial Library
A Visual Analytics Approach for the Situationally Aware Distribution System	\$44,000	Principal Investigator (PI): Cho, Isaac Co-PIs: Cecchi, Valentina; Dou, Wenwen; Wartell, Zachary	Computer Science	Sponsor: Electric Power Research Institute (EPRI)
ABI Innovation: Annotation of cis-regulatory sequences using a large number of ChIP-seq datasets	\$808,396	Principal Investigator (PI): Su, ZhengChang	Bioinformatics and Genomics	Sponsor: National Science Foundation (NSF)
Advancing the Technology Readiness Level of Magnetic Gears Through Modular Design and Endurance Testing	\$64,197	Principal Investigator (PI): Williams, Wesley	Engineering Technology and Construction Management	Sponsor: UNC Coastal Studies Institute (UNC-CSI)

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Aerodynamics of NASCAR Racecars	\$70,440	Principal Investigator (PI): Uddin, Mesbah	Mechanical Engineering and Engineering Science	Sponsor: Joe Gibbs Racing
AFRL University Engineering Design Challenge Program	\$20,000	Principal Investigator (PI): Browne, Aidan	Engineering Technology and Construction Management	Sponsor: Technology Service Corporation Prime Sponsor: Department of Defense (DOD) Department of the Air Force (DAF) Air Force Office of Scientific Research (AFOSR)
Aquatic Cellular Biomarker Projects	\$30,935	Principal Investigator (PI): Ringwood, Amy	Biological Sciences	Sponsor: TDI-Brooks International, Inc.
Basic Ordering Agreement: Securing American Manufacturing (SAM)	\$35,687	Principal Investigator (PI): Browne, Aidan	Engineering Technology and Construction Management	Sponsor: Consolidated Nuclear Security, LLC (CNS) Prime Sponsor: Department of Energy (DOE)
Building Healthy Lifestyles from All Directions	\$130,444	Principal Investigator (PI): Racine, Elizabeth	Public Health Sciences	Sponsor: Cabarrus Partnership for Children
Charlotte Mecklenburg Senior Center - Graduate Student Support	\$38,034	Principal Investigator (PI): Moore-Harrison, Trudy	Kinesiology	Sponsor: Mecklenburg County Parks and Recreation Department
Charlotte Water Environmental and Experiential Learning Service	\$96,030	Principal Investigator (PI): Keen, Olya	Civil and Environmental Engineering	Sponsor: City of Charlotte
Clinical Translational Science Award - Clinical Informatics Faculty	\$33,623	Principal Investigator (PI): Ge, Yaorong	Software and Information Systems	Sponsor: Wake Forest University Health Sciences Prime Sponsor: National Institutes of Health (NIH)
Collaborative: Carolina Cyber Defender Scholarship	\$1,180,213	Principal Investigator (PI): Chu, Bei-Tseng Co-PIs: Al-Shaer, Ehab; Lipford, Heather; Shehab, Mohamed; Wang, Weichao; Tolone, William	Software and Information Systems	Sponsor: National Science Foundation (NSF)

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Conduct Performance Study of Mini-Pilot Test-Beds at 3 Designated Power Plant Site in Southeast of the US	\$82,500	Principal Investigator (PI): Ogunro, Vincent	Civil and Environmental Engineering	Sponsor: Electric Power Research Institute (EPRI)
Development of Performance Curves for Composite Pavements in PMS	\$18,515	Principal Investigator (PI): Chen, Dong	Engineering Technology and Construction Management	Sponsor: North Carolina Department of Transportation (NCDOT) Prime Sponsor: Federal Highway Administration (FHWA)
Equipment for Object Recognition and Robotic Manipulation	\$312,215	Principal Investigator (PI): Xiao, Jing Co-PI: Akella, Srinivas	Computer Science	Sponsor: Department of Defense (DOD) Department of the Army (DA) Army Research Office (ARO)
Evaluating the impact of a goal setting intervention program with grandparents raising their grandchildren	\$36,802	Principal Investigator (PI): Montoro-Rodriguez, Julian	School of Social Work	Sponsor: Southminster Inc.
Field-Scale Testing of Hydrology of Water Balance Covers	\$58,011	Principal Investigator (PI): Khire, Milind	Civil and Environmental Engineering	Sponsor: Waste Management, Inc.
Identifying Banana SNP Sequences for the development of the Illumina Banana SNP Chip	\$25,000	Principal Investigator (PI): Reid, Robert	Bioinformatics and Genomics	Sponsor: International Institute of Tropical Agriculture (IITA) Prime Sponsor: Bill and Melinda Gates Foundation
IPA- Program Manager for the Advances in Biological Informatics Program in the BIO Division of the National Science Foundation.	\$170,669	Principal Investigator (PI): Weller, Jennifer	Bioinformatics and Genomics	Sponsor: National Science Foundation (NSF)
Maximizing the Impact of ePHIM in Low-Income, Multiethnic Populations	\$14,618	Principal Investigator (PI): Latulipe, Celine	Software and Information Systems	Sponsor: Wake Forest University Health Sciences Prime Sponsor: Agency for Healthcare Research and Quality (AHRQ)
Maximizing Vehicle Fuel Economy Through the Real-Time, Collaborative, and Predictive Co-Optimization of Routing, Speed, and Powertrain Control	\$375,000	Principal Investigator (PI): Vermillion, Christopher	Mechanical Engineering and Engineering Science	Sponsor: Penn State University Prime Sponsor: Department of Energy (DOE) Advanced Research Projects Agency-Energy (ARPA-E)

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Mecklenburg County Public Service Fellowship	\$9,655	Principal Investigator (PI): Barth, Thomas	Political Science and Public Administration	Sponsor: Charlotte-Mecklenburg County Government
Metrology for Additive Manufacturing: Technical Proposal	\$60,000	Principal Investigator (PI): Evans, Christopher	Mechanical Engineering and Engineering Science	Sponsor: Department of Commerce (DOC) National Institute of Standards and Technology (NIST)
NC Space Grant Affiliate Program - NASA Funding GY2015 (Year 1 of 3)	\$10,000	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)
Non-Intrusive Load Monitoring for Tracking the Health of Multiple Motors on a Single Electrical Bus	\$74,708	Principal Investigator (PI): Cox, Robert	Electrical and Computer Engineering	Sponsor: Electric Power Research Institute (EPRI)
NSF Center for Metamaterials Phase II	\$45,000	Principal Investigator (PI): Aggarwal, Ishwar	Physics and Optical Science	Sponsor: National Science Foundation (NSF)
NSF Graduate Institutes for Science Communication and Public Engagement	\$400,290	Principal Investigator (PI): Tankersley, Richard	Deans Office College of Liberal Arts and Sciences	Sponsor: National Science Foundation (NSF)
Nurse Anesthesia Traineeship, UNC Charlotte	\$2,800	Principal Investigator (PI): Langford, David	School of Nursing	Sponsor: Health Resources and Services Administration (HRSA)
Online learning platform for introducing clinicians and researchers to metabolomics	\$8,810	Principal Investigator (PI): Du, Xiuxia	Bioinformatics and Genomics	Sponsor: University of North Carolina at Chapel Hill (UNC-CH) Prime Sponsor: National Institutes of Health (NIH)
PAVE SE Raleigh Charter School TIMS Computerized Bus Routing Project 2017-18	\$4,050	Principal Investigator (PI): Pressley, JoAnne	Urban Institute	Sponsor: PAVE Southeast Raleigh Charter School
Prototype Magnesium Oxychloride Cement - Geopolymer Cement Composite Wall Board Testing: Strength and Fire Resistance Characteristics	\$16,642	Principal Investigator (PI): Braxtan, Nicole Co-PI: Tempest, Brett	Civil and Environmental Engineering	Sponsor: Fire Retardant Chemical Technologies LLC

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Reducing chemical wear of single crystal diamond tools cutting alloys	\$327,727	Principal Investigator (PI): Evans, Christopher Co-PI: Boreman, Glenn	Mechanical Engineering and Engineering Science	Sponsor: National Science Foundation (NSF)
ReSArt - Recommendation System for ART	\$50,000	Principal Investigator (PI): Ras, Zbigniew Co-PI: Collins, Devin	Computer Science	Sponsor: National Science Foundation (NSF)
Research on Tire Camber Control for Over-the-Road Trucks	\$3,500	Principal Investigator (PI): Tkacik, Peter	Mechanical Engineering and Engineering Science	Sponsor: Michelin Americas Research Corporation (MARC)
SaTC: EDU: Establishing Digital Citizenship by Implementing Cyber Safety Curriculum with Middle School Students	\$300,000	Principal Investigator (PI): Martin, Florence Co-PIs: Wang, Chuang; Petty, Teresa; Wang, Weichao	Educational Leadership	Sponsor: National Science Foundation (NSF)
SCC-Planning:Pedestrian Safe and Secure Communities with Ambient Machine Vision	\$99,156	Principal Investigator (PI): Tabkhivayghan, Hamed Co-PIs: Ravindran, Arun; Reid, Shannon; Pulugurtha, Srinivas; Han, Tao	Electrical and Computer Engineering	Sponsor: National Science Foundation (NSF)
Setting Appropriate Benefit/Condition Jumps for Pavement Treatments in PMS	\$18,515	Principal Investigator (PI): Chen, Dong	Engineering Technology and Construction Management	Sponsor: North Carolina Department of Transportation (NCDOT) Prime Sponsor: Federal Highway Administration (FHWA)
Shalom Park Concrete Petrographic Evaluation	\$3,144	Principal Investigator (PI): Cavalline, Tara	Engineering Technology and Construction Management	Sponsor: SKA Consulting Engineers, Inc.
Supporting Strategic Writers: Effects of an Innovative Developmental Writing Program on Writing and Reading Outcomes	\$110,162	Principal Investigator (PI): Philippakos, Zoi Apostolia	Reading and Elementary Education	Sponsor: University of Delaware Prime Sponsor: US Department of Education (DOED)

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Sustainability of PROVIDER 360	\$49,876	Principal Investigator (PI): Richardson, Sonyia	School of Social Work	Sponsor: Cardinal Innovations Healthcare Solutions
To Unite Charlotte, Race Matters	\$11,020	Principal Investigator (PI): McCarter, Susan	School of Social Work	Sponsor: Race Matters for Juvenile Justice (RMJJ) Prime Sponsor: United Way of Central Carolinas
UNC Charlotte PhD Program in Special Education with a Specialty in Multi-tiered Interventions	\$249,996	Principal Investigator (PI): Wood, Charles Co-PI: Lo, Ya-yu	Special Education and Child Development	Sponsor: US Department of Education (DOED)
University City Partners & CHARP: Community Engagement in Hidden Valley/Newell South-Tom Hunter Station	\$25,000	Principal Investigator (PI): Sorensen, Janni	Geography and Earth Sciences	Sponsor: University City Partners
University of North Carolina at Charlotte PhD Program 2014	\$249,997	Principal Investigator (PI): Test, David	Special Education and Child Development	Sponsor: US Department of Education (DOED)
Urban-Rural Connections in Charlotte Region for Economic Renewal	\$329,174	Principal Investigator (PI): Michael, Jeffery Co-PIs: Newsom, Mary; Graves, William	Urban Institute	Sponsor: Duke Endowment
Violent Non-State Rivalry and Organizational Behavior	\$268,513	Principal Investigator (PI): Conrad, Justin	Political Science and Public Administration	Sponsor: National Science Foundation (NSF)
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)
W911NF-17-S-0002 - Paragraph 3. e. ARO Workshop on HoneyThings: Automated and Dynamic Cyber Deception	\$25,000	Principal Investigator (PI): Wei, Jinpeng Co-PI: Al-Shaer, Ehab	Software and Information Systems	Sponsor: Department of Defense (DOD) Department of the Army (DA) Army Research Office (ARO)
Wave Energy Monitoring and Health Management Using Underwater Wireless Communication Network	\$70,000	Principal Investigator (PI): Zhao, Tiefu Co-PI: Han, Tao	Electrical and Computer Engineering	Sponsor: UNC Coastal Studies Institute (UNC-CSI)