## July 29, 2015

The Office of Research and Economic Development is pleased to announce awards received by UNC Charlotte Researchers in the month of June, 2015.

Total amount awarded for the month of June was \$9,553,920

Fiscal Year To Date Total: \$47,069,288

Award Title	Amount	Investigators	PI Dept.	Sponsors
2015-16 Berkeley County Schools	\$4,576	Principal Investigator (PI): Pressley, JoAnne	Urban Institute	<b>Sponsor:</b> Berkeley County Schools
6 LED Mask for Press Fit Light Pipe 45-32800-30 REV A	\$5,048	Principal Investigator (PI): Owen, Joseph Co-PIs: Davies, Matthew	Mechanical Engineering and Engineering Science	Sponsor: Magic Leap Inc.
A Child's Place End of Year Annual Report Data Update 2015	\$1,500	Principal Investigator (PI): Gavarkavich, Diane	Urban Institute	Sponsor: A Child's Place
A Multilevel mHealth Colorectal Cancer Screening (mCRC) Intervention for Primary Care Practices	\$14,544	Principal Investigator (PI): Troyer, Jennifer	Deans Office College of Business	Sponsor: Wake Forest University Health Sciences Prime Sponsor: National Institutes of Health (NIH)
Advancing Dimensional Metrology for Intelligent Manufacturing withThe Center for Precision Metrology	\$80,000	Principal Investigator (PI): Evans, Christopher Co-PIs: Miller, Jimmie	Mechanical Engineering and Engineering Science	Sponsor: Department of Commerce (DOC) National Institute of Standards and Technology (NIST)
Behavioral Stigma Index	\$4,000	Principal Investigator (PI): Hadzikadic, Mirsad	Software and Information Systems	Sponsor: Carolinas HealthCare System
bZIP Protein Function in an Organismal Model for Peripheral Circadian Clocks	\$324,095	Principal Investigator (PI): Reitzel, Adam	Biological Sciences	Sponsor: National Institutes of Health (NIH)
CAREER: Plasmon-mediated photo-absorption and carrier recombination dynamics in semiconductor/metal hybrid nano-systems	\$300,764	Principal Investigator (PI): Jones, Marcus	Chemistry	Sponsor: National Science Foundation (NSF)

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Collaborative Proposal: ABI Innovation: Rapid, Interactive, Visual Mining of Biological Motion	\$237,407	Principal Investigator (PI): Shin, Min Co-PIs: Souvenir, Richard; Schneider, Stanley	Computer Science	Sponsor: National Science Foundation (NSF)
Collaborative Research: I/UCRC for Robots and Sensors for the Human Well-being	\$8,000	Principal Investigator (PI): Xiao, Jing	Computer Science	Sponsor: National Science Foundation (NSF)
Collaborative Research: ABI Innovation: Towards high performance flexible transcription factor-DNA docking	\$196,028	Principal Investigator (PI): Guo, Jun-tao	Bioinformatics and Genomics	Sponsor: National Science Foundation (NSF)
Continued Maintenance and Development of Software: Integrated Genome Browser and the Genoviz SDK, Visualization Software for Next- Generation Genomics	\$293,987	Principal Investigator (PI): Loraine, Ann	Bioinformatics and Genomics	Sponsor: NIH National Center for Research Resources (NCRR)
Creating a Usable Security and Privacy Body of Knowledge	\$194,439	Principal Investigator (PI): Lipford, Heather Co-PIs: Rorrer, Audrey; Martin, Florence	Software and Information Systems	Sponsor: National Science Foundation (NSF)
Crime Analysis Capability	\$49,500	Principal Investigator (PI): Reid, Shannon	Criminal Justice and Criminology	Sponsor: Charlotte-Mecklenburg Police Department Prime Sponsor: Bureau of Justice Assistance
Designing and Building an Outreach Robot	\$10,000	Principal Investigator (PI): Conrad, James	Electrical and Computer Engineering	<b>Sponsor:</b> Discover Technology, Inc.
Developing a Systematic Approach to Improving Bottleneck Analysis in North Carolina	\$199,835	Principal Investigator (PI): Fan, Wei	Civil and Environmental Engineering	Sponsor: North Carolina Department of Transportation (NCDOT) Prime Sponsor: Federal Highway Administration (FHWA)
Development of CFD Methodologies for Improved Underhood Airflow Management	\$70,000	Principal Investigator (PI): Uddin, Mesbah	Mechanical Engineering and Engineering Science	Sponsor: Hyundai America Technical Center, Inc. (HATCI)

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Development of Performance Curves for Composite Pavements in PMS	\$238,930	Principal Investigator (PI): Chen, Dong Co-PIs: Sherlock, Barry; Nicholas, Thomas	Engineering Technology and Construction Management	Sponsor: North Carolina Department of Transportation (NCDOT) Prime Sponsor: Federal Highway Administration (FHWA)
Distinguished Chair in American Studies	\$44,650	Principal Investigator (PI): Freitag, Alan	Communication Studies	<b>Sponsor:</b> Fulbright Scholar Program
DoS English Language Specialist Award to Japan Summer 2015	\$6,250	Principal Investigator (PI): Salas, Spencer	Middle, Secondary and K-12 Education	Sponsor: Georgetown University Prime Sponsor: Department of State (DOS)
Early College education in cooperation with Charlotte Mecklenburg Schools	\$65,023	Principal Investigator (PI): Howard, Michele	University College	Sponsor: Charlotte Mecklenburg Schools Prime Sponsor: NIH Center for Information Technology (CIT)
Effect of Weathering on the Performance of Fire Retardant Coatings	\$7,500	Principal Investigator (PI): Zhou, Aixi	Engineering Technology and Construction Management	Sponsor: Insurance Institute for Business & Home Safety (IBHS)
Engaging Military Veterans to Increase STEM Enrollment and Degrees Awarded	\$200,000	Principal Investigator (PI): Tkacik, Peter Co-PIs: Lim, Jae Hoon; Day, Kent; Uddin, Mesbah; Tolley, Patricia; Keanini, Russell	Mechanical Engineering and Engineering Science	Sponsor: Department of Defense (DOD) Department of the Navy (DN)
Guidelines for Prioritization of Bridge Replacement, Rehabilitation, and Preservation Projects	\$181,802	Principal Investigator (PI): Whelan, Matthew Co-PIs: Cavalline, Tara	Civil and Environmental Engineering	Sponsor: North Carolina Department of Transportation (NCDOT) Prime Sponsor: Federal Highway Administration (FHWA)
HRSA SDS - BSN (Edwards)	\$470,000	Principal Investigator (PI): Herron, Elizabeth	School of Nursing	Sponsor: Health Resources and Services Administration (HRSA)

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Improved Methods for Generator Rotor Tramming and Charting	\$4,908	Principal Investigator (PI): Ziegert, John Co-PIs: Schmidt, Peter	Mechanical Engineering and Engineering Science	Sponsor: Siemens Energy
Increasing the Utilization of Weather Data for Safety Applications and Traveler Information	\$138,261	Principal Investigator (PI): Duddu, Venkata Ramana Co-PIs: Eastin, Matthew; Pulugurtha, Srinivas	Civil and Environmental Engineering	Sponsor: North Carolina Department of Transportation (NCDOT)
Institutional Transformations and Shifting Patterns of Social Inequality in Urban China	\$25,631	Principal Investigator (PI): Zhao, Wei	Sociology	Sponsor: Chiang Ching-Kuo Foundation (CCKF)
Internal Curing of Concrete Using Lightweight Aggregate	\$253,128	Principal Investigator (PI): Cavalline, Tara Co-PIs: Tempest, Brett	Engineering Technology and Construction Management	Sponsor: North Carolina Department of Transportation (NCDOT) Prime Sponsor: Federal Highway Administration (FHWA)
Intervention Development for Primary Care Diabetes Communication Skills	\$16,300	Principal Investigator (PI): Davis, Boyd	English	Sponsor: Ralph H. Johnson Veterans Affairs Medical Center
IUSE/PFE:RED: The Connected Learner: Design Patterns for Transforming Computing and Informatics Education	\$1,999,959	Principal Investigator (PI): Maher, Mary Co-PIs: Rorrer, Audrey; Cukic, Bojan; Latulipe, Celine; Souvenir, Jamie; Mays, Lawrence; Rogelberg, Steven	Software and Information Systems	Sponsor: National Science Foundation (NSF)
Joy Charter School TIMS Computerized Bus Routing Project 2015-16	\$2,700	Principal Investigator (PI): Pressley, JoAnne	Urban Institute	Sponsor: Maureen Joy Charter School

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Leveraging Industry Research to Educate a Future Electric Grid Workforce	\$146,133	Principal Investigator (PI): Chowdhury, Badrul Co-PIs: Parkhideh, Babak; Enslin, Johan; Noras, Maciej; Manjrekar, Madhav; Cox, Robert; Cecchi, Valentina; Salami, Zia	Electrical and Computer Engineering	Sponsor: Electric Power Research Institute (EPRI) Prime Sponsor: Department of Energy (DOE)
LSTA Access & Digitization 2013-2014 Project Grant	\$100,000	Principal Investigator (PI): Schmitz, Dawn	Library Special Collections	Sponsor: North Carolina State Library Prime Sponsor: Institute of Museum and Library Services
Magnetic gearbox sizing analysis for a fan application	\$6,938	Principal Investigator (PI): Bird, Jonathan	Electrical and Computer Engineering	Sponsor: Big Ass Fans
mHealth Delivery of a Motivational Intervention to Address Heavy Drinking among College Freshmen	\$299,999	Principal Investigator (PI): Kazemi, Donna Co-PIs: Insley, Deborah; Robinson, Leslie; Shehab, Mohamed	School of Nursing	Sponsor: Agency for Healthcare Research and Quality (AHRQ)
Microbial Endocrinology as a Mechanism Governing Stress- Induced Microbiome-Gut-Brain Communication	\$34,736	Principal Investigator (PI): Fodor, Anthony Co-PIs: Gharaibeh, Ra'ad	Bioinformatics and Genomics	Sponsor: Texas Tech University Health Sciences Center Prime Sponsor: Department of Defense (DOD) Department of the Navy (DN) Office of Naval Research (ONR)
National Science Foundation Graduate Research Fellowship Program	\$73,000	Principal Investigator (PI): Sell, Susan	Bioinformatics and Genomics	Sponsor: National Science Foundation (NSF)
Natural Resources and Armed Conflict	\$100,000	Principal Investigator (PI): Walsh, James Co-PIs: Whitaker, Beth; Conrad, Justin	Political Science and Public Administration	Sponsor: Department of Defense (DOD)

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NCMEP - UNC Charlotte 2015- 2016 Program	\$50,000	Principal Investigator (PI): Ozelkan, Ertunga Co-PIs: Teng, Sheng-Hsien	Systems Engineering and Engineering Management	Sponsor: North Carolina Manufacturing Extension Partnership (NCMEP) Prime Sponsor: National Institute of Science and Technology (NIST)
North Carolina Data Science and Analytics Initiative	\$2,168,379	Principal Investigator (PI): Hadzikadic, Mirsad Co-PIs: Cukic, Bojan; Schlueter, Shannon	Software and Information Systems	Sponsor: University of North Carolina General Administration (UNC GA)
Nouveau Sud, Nouveau Cirque	\$25,000	Principal Investigator (PI): Cruz Casas, Carlos	Theatre	<b>Sponsor:</b> City of Charlotte Arts and Science Council
Nurse Anesthesia Traineeship, UNC Charlotte	\$35,800	Principal Investigator (PI): Langford, David	School of Nursing	Sponsor: Health Resources and Services Administration (HRSA)
Patient Mobility Data Assessment Center	\$121,791	Principal Investigator (PI): Zheng, Naiquan	Mechanical Engineering and Engineering Science	Sponsor: Carolinas HealthCare System Prime Sponsor: AO Foundation
Ph.D. Graduate Assistantship with the Department of Counseling at the University of North Carolina at Charlotte (Leigh Dongre)	\$14,319	Principal Investigator (PI): Abrams, Lyndon	Counseling	Sponsor: Wake Forest University Baptist Medical Center
Ph.D. Graduate Assistantship with the Department of Counseling at the University of North Carolina at Charlotte (Lindsay Shearer)	\$11,209	Principal Investigator (PI): Abrams, Lyndon	Counseling	<b>Sponsor:</b> Wake Forest University Baptist Medical Center
Phaseless inverse scattering problems for imaging of nano structures	\$57,942	Principal Investigator (PI): Klibanov, Michael	Mathematics and Statistics	Sponsor: Department of Defense (DOD) Department of the Navy (DN) Office of Naval Research (ONR)
Programmatic Initiatives Support	\$12,000	Principal Investigator (PI): Lewis, Chance	Middle, Secondary and K-12 Education	<b>Sponsor:</b> TresSports Interagency Collaborative (TIC)

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PTAC - DLA 2015-2016	\$37,365	Principal Investigator (PI): McAllister, George	Small Business Technology Development Center (SBTDC)	Sponsor: NC Small Business Technology Devel Council Prime Sponsor: Department of Defense (DOD) Defense Logistics Agency
Regulation of floral growth and patterning in Arabidopsis thaliana	\$56,198	Principal Investigator (PI): Loraine, Ann	Bioinformatics and Genomics	Sponsor: University of South Carolina (USC) Prime Sponsor: National Science Foundation (NSF)
Revolutionizing and commercializing rapid molecular diagnostics for viral and bacterial pathogen quantification in marine waters and seafood	\$171,308	Principal Investigator (PI): Oliver, James Co-PIs:	Biological Sciences	Sponsor: University of North Carolina at Chapel Hill (UNC-CH) Prime Sponsor: University of North Carolina General Administration (UNC GA)
SBIR: Innovative Deflectometry Measurement Techniques	\$26,000	Principal Investigator (PI): Davies, Angela Co-PIs: Evans, Christopher	Physics and Optical Science	Sponsor: SURVICE Engineering Company Prime Sponsor: National Aeronautics and Space Administration (NASA)
Setting Appropriate Benefit/Condition Jumps for Pavement Treatments in PMS	\$242,388	Principal Investigator (PI): Chen, Dong Hildreth, John	Engineering Technology and Construction Management	Sponsor: North Carolina Department of Transportation (NCDOT) Prime Sponsor: Federal Highway Administration (FHWA)
Shaping the Way We Teach Webinar for DoS Office of English Language Programs	\$950	Principal Investigator (PI): Salas, Spencer	Middle, Secondary and K-12 Education	Sponsor: Georgetown University Department of State (DOS)
Status and Behavior	\$12,000	Principal Investigator (PI): Webster, Murray	Sociology	Sponsor: National Science Foundation (NSF)
Sugar Creek Charter School TIMS Computerized Bus Routing Project 2015-16	\$2,700	Principal Investigator (PI): Pressley, JoAnne	Urban Institute	Sponsor: Sugar Creek Charter School

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Technical Review and Strategic Planning Services North Carolina Coal Ash Management	\$90,000	Principal Investigator (PI): Khire, Milind Hardin, Christopher	Civil and Environmental Engineering	Sponsor: North Carolina Coal Ash Management Commission
University of Puerto Rico - Mayaguez FELEP Evaluation	\$9,000	Principal Investigator (PI): Dika, Sandra	Educational Leadership	Sponsor: University of Puerto Rico Mayaguez Campus Prime Sponsor: US Department of Education (DOED)