

July 22, 2014

The Office of Research and Economic Development is pleased to announce awards received by UNC Charlotte Researchers in the month of June, 2014.

Total amount awarded for the month of June was \$6,776,254

Fiscal Year To Date Total: \$36,145,048

Award Title	Amount	Investigators	PI Dept.	Sponsors
2013-14 Problem Gambling Outreach/Prevention/Awareness Plan	\$5,000	Principal Investigator (PI): Robinson, Leslie	Counseling Center	Sponsor: NCDHHS Division of Mental Health, Developmental Disabilities and Substance Abuse Services (MHDDSAS)
2-Day Lecture Series: TA Instruments Technical Seminar on the Theory of Rheology and Materials Characterization	\$5,000	Principal Investigator (PI): Weaver, Katherine Co-PI: Guyer, Regina	Mechanical Engineering and Engineering Science	Sponsor: TA Instruments-Waters LLC
3D Printed Lightweight Optics for Directed Energy Systems	\$41,035	Principal Investigator (PI): Williams, Wesley	Engineering Technology and Construction Management	Sponsor: Optimax Systems, Inc. Prime Sponsor: Department of Defense (DOD) Missile Defense Agency
A Child's Place End of Year Annual Report 2014	\$3,500	Principal Investigator (PI): Gavarkavich, Diane	Urban Institute	Sponsor: A Child's Place
Accessing young Black MSM for HIV prevention through online social networking	\$140,945	Principal Investigator (PI): Rowan, Diana	Social Work	Sponsor: Department of Health and Human Services (DHHS) / Centers for Disease Control (CDC)
Analysis of Failure Mechanisms of APH Seals	\$7,793	Principal Investigator (PI): Sarunac, Nenad Co-PI: Cherukuri, Harischandra	Mechanical Engineering and Engineering Science	Sponsor: Paragon Airheater Technologies
AVL Simulation Tool Development	\$23,333	Principal Investigator (PI): Day, Kent	Mechanical Engineering and Engineering Science	Sponsor: AVL List GmbH (AVL)
Behavioral Stigma Index	\$6,360	Principal Investigator (PI): Hadzikadic, Mirsad	Software and Information Systems	Sponsor: Carolinas HealthCare System

Bioethics Research Network - Food Ethics	\$3,500	Principal Investigator (PI): Hull, Gordon	Philosophy	Sponsor: North Carolina Biotechnology Center (NCBC)
CAREER: Plasmon-mediated photo-absorption and carrier recombination dynamics in semiconductor/metal hybrid nano-systems	\$232,384	Principal Investigator (PI): Jones, Marcus	Chemistry	Sponsor: National Science Foundation (NSF)
CeFO: Minimizing task specific uncertainty in CMM based freeform optics metrology	\$16,260	Principal Investigator (PI): Evans, Christopher Co-PI: Davies, Angela	Mechanical Engineering and Engineering Science	Sponsor: University of Rochester Prime Sponsor: All Other Business and Industry
Children's Scholarship Fund-Charlotte Student Outcome Evaluation 2014	\$10,500	Principal Investigator (PI): Gavarkavich, Diane	Urban Institute	Sponsor: Children's Scholarship Fund
Collaborative Proposal: ABI Innovation: Rapid, Interactive, Visual Mining of Biological Motion	\$230,724	Principal Investigator (PI): Shin, Min Co-PIs: Souvenir, Richard; Schneider, Stanley	Computer Science	Sponsor: National Science Foundation (NSF)
Collaborative Research: I/UCRC Center for Configuration Analytics and Automation	\$112,275	Principal Investigator (PI): Al-Shaer, Ehab Co-PI: Chu, Bei-Tseng	Software and Information Systems	Sponsor: National Science Foundation (NSF)
Computational Modeling: bench-scale, pilot-scale, and full-scale ash/gypsum/wastewater mixtures in support of zero liquid discharge applications	\$98,040	Principal Investigator (PI): Daniels, John	Civil and Environmental Engineering	Sponsor: Southern Company
Continued Maintenance and Development of Software: Integrated Genome Browser and the Genoviz SDK, Visualization Software for Next-Generation Genomics	\$294,171	Principal Investigator (PI): Loraine, Ann	Bioinformatics and Genomics	Sponsor: NIH National Center for Research Resources (NCRR)

Cost Analysis on the Reuse of Concrete Residuals	\$209,548	Principal Investigator (PI): Tymvios, Nicholas Co-PI: Cho, Chung-Suk; Cavalline, Tara	Engineering Technology and Construction Management	Sponsor: North Carolina Department of Transportation (NCDOT) Prime Sponsor: Federal Highway Administration (FHWA)
Development and Operation of a Web GIS-enabled Data Management System for the Santee Experimental Forest	\$19,000	Principal Investigator (PI): Tang, Wenwu	Geography and Earth Sciences	Sponsor: United States Department of Agriculture (USDA)
Development of Inverse Scattering - Structure Synthesis Methods; subwavelength scale imaging - metamaterial design	\$53,150	Principal Investigator (PI): Fiddy, Michael	Physics and Optical Science	Sponsor: Department of Defense (DOD), Department of the Army (DA), Army Research Office (ARO)
Development of Testing Procedures for Experimental Evaluation of Mechanical Behavior of Composite Line Post Insulators	\$34,004	Principal Investigator (PI): Young, David	Civil and Environmental Engineering	Sponsor: Electric Power Research Institute (EPRI)
Doctoral Dissertation Research: Socio-spatial Geographies of Hispanic Immigrant Youth Accessing the Urban Labor Market	\$10,312	Principal Investigator (PI): Smith, Heather Co-PI: Schuch, Joanna	Geography and Earth Sciences	Sponsor: National Science Foundation (NSF)
Enhancing Social Service Research & Evaluation	\$15,484	Principal Investigator (PI): Portwood, Sharon	Public Health Sciences	Sponsor: Mecklenburg County Department of Social Services (DSS)
Evaluation of Benefit Weight Factors and Decision Trees for Automated Distress Data Models	\$195,846	Principal Investigator (PI): Chen, Dong Co-PIs: Hildreth, John; Nicholas, Thomas	Engineering Technology and Construction Management	Sponsor: North Carolina Department of Transportation (NCDOT) Prime Sponsor: Federal Highway Administration (FHWA)
Evaluation of the Implementation of the K-3 Formative Assessments	\$250,000	Principal Investigator (PI): Lambert, Richard Co-PI: Shue, Pamela	Educational Leadership	Sponsor: North Carolina Department of Public Instruction (NCDPI)

Exceptional Children Regional Positive Behavior Support/ Autism Consultant	\$312,876	Principal Investigator (PI): Algozzine, Robert	Educational Leadership	Sponsor: NC Dept of Public Instruction(NCDPI) Prime Sponsor: Department of Education (DOE)
Girls and Tech	\$3,000	Principal Investigator (PI): Raja, Shagufta	Center for STEM Education	Sponsor: National Center for Women and Information Technology (NCWIT)
Graduate Assistantship with OrthoCarolina Research Institute	\$22,008	Principal Investigator (PI): Huet, Yvette	Kinesiology	Sponsor: OrthoCarolina
Guideline for Roadway Utility Excavation Practices in NC Regions	\$229,299	Principal Investigator (PI): Chen, Shen-En Co-PIs: Pando, Miguel; Janardhanam, Rajaram	Civil and Environmental Engineering	Sponsor: North Carolina Department of Transportation (NCDOT) Prime Sponsor: Federal Highway Administration (FHWA)
High Resolution FTIR system for the identification of homemade explosives in conventional environments	\$148,930	Principal Investigator (PI): Aggarwal, Ishwar Co-PI: Poutous, Menelaos	Physics and Optical Science	Sponsor: Department of Defense(DOD) Department of the Navy (DN) Office of Naval Research (ONR)
HRSA Scholarships for Disadvantaged Students (SDS) - BSN	\$566,938	Principal Investigator (PI): Edwards, Lienne	School of Nursing	Sponsor: Health Resources and Services Administration (HRSA)
Improved Data for Mechanistic-Empirical Pavement Design for Concrete Pavements	\$229,955	Principal Investigator (PI): Cavalline, Tara Co-PI: Tempest, Brett	Engineering Technology and Construction Management	Sponsor: North Carolina Department of Transportation (NCDOT) Prime Sponsor: Federal Highway Administration (FHWA)
Improvement of Material Criteria for Highway Embankment Construction	\$215,605	Principal Investigator (PI): Janardhanam, Rajaram Co-PI: Pando, Miguel; Chen, Shen-En	Civil and Environmental Engineering	Sponsor: North Carolina Department of Transportation (NCDOT) Prime Sponsor: Federal Highway Administration (FHWA)
Incarcerated Young Adults Study	\$18,308	Principal Investigator (PI): McCarter, Susan	Social Work	Sponsor: Z Smith Reynolds Foundation

Industrial membership fees for the new Site of I/UCRC Safety, Security, and Rescue Research Center	\$65,951	Principal Investigator (PI): Xiao, Jing	Computer Science	Sponsor: All Other Business and Industry
Integration of IFC (Industry Foundation Class) and GIS (Geographical Information System) in BIM (Building Information Modeling)	\$23,000	Principal Investigator (PI): Kim, Hyunjoo	Engineering Technology and Construction Management	Sponsor: Korea Institute of Construction Technology (KICT)
I/UCRC for Metamaterials	\$42,165	Principal Investigator (PI): Astratov, Vasily	Physics and Optical Science	Sponsor: National Science Foundation (NSF)
Measurement Uncertainty in Manufacturing Metrology - Data Pixel case study	\$11,399	Principal Investigator (PI): Morse, Edward	Mechanical Engineering and Engineering Science	Sponsor: Corning Optical Communications, LLC
Mid-spatial frequency specification and characterization for freeform surfaces	\$27,740	Principal Investigator (PI): Davies, Angela Co-PI: Evans, Christopher	Physics and Optical Science	Sponsor: University of Rochester Prime Sponsor: All Other Business and Industry
Minimally Invasive Laser Treatment of Female Stress Urinary Incontinence	\$433,901	Principal Investigator (PI): Fried, Nathaniel	Physics and Optical Science	Sponsor: National Institutes of Health (NIH), National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK)
Mobility Assessment with Sensors	\$11,360	Principal Investigator (PI): Zheng, Naiquan	Mechanical Engineering and Engineering Science	Sponsor: Carolinas HealthCare System
Monetizing Reliability to Evaluate the Impact of Transportation Alternatives	\$114,929	Principal Investigator (PI): Pulugurtha, Srinivas	Civil and Environmental Engineering	Sponsor: North Carolina Department of Transportation (NCDOT) Prime Sponsor: Federal Highway Administration (FHWA)
Numerical Methods for Studying Optical Absorption of Random Media and Quantum Dots for Solar Cell Designs	\$71,535	Principal Investigator (PI): Cai, Wei	Mathematics and Statistics	Sponsor: Department of Defense (DOD), Department of the Army (DA), Army Research Office (ARO)
Nurse Anesthetist Traineeship Program	\$36,454	Principal Investigator (PI): Langford, David	School of Nursing	Sponsor: Health Resources and Services Administration (HRSA)

Optical Superresolution for Metamaterial Inspection	\$10,000	Principal Investigator (PI): Astratov, Vasily	Physics and Optical Science	Sponsor: CUNY Center for Metamaterials Prime Sponsor: National Science Foundation (NSF)
Performance Evaluation of Strong Post Double-faced W-beam Guardrail and Strong Post Doubled-faced Thrie-Beam Guardrail at MASH Test Level 4 (TL-4) and Test Level 5 (TL-5) conditions	\$298,474	Principal Investigator (PI): Fang, Hongbing	Mechanical Engineering and Engineering Science	Sponsor: North Carolina Department of Transportation (NCDOT) Prime Sponsor: Federal Highway Administration (FHWA)
Confidential	\$321,195	Principal Investigator (PI): Fiddy, Michael	Physics and Optical Science	Sponsor: Confidential
Preventive Maintenance (PM) Criteria	\$203,913	Principal Investigator (PI): Hildreth, John Co-PI: Tymvios, Nicholas	Engineering Technology and Construction Management	Sponsor: North Carolina Department of Transportation (NCDOT) Prime Sponsor: Federal Highway Administration (FHWA)
Reactive-Ion Etching System to fabricate Large Optical Windows with High-Laser Damage Threshold for High-Energy Lasers (HEL)	\$318,700	Principal Investigator (PI): Aggarwal, Ishwar Co-PI: Poutous, Menelaos	Physics and Optical Science	Sponsor: Department of Defense (DOD), Department of the Navy (DN) Office of Naval Research (ONR)
Regional EC Consultant, Exceptional Children (Education Consultant II)	\$339,695	Principal Investigator (PI): Algozzine, Robert	Educational Leadership	Sponsor: NC Dept of Public Instruction Prime Sponsor: Department of Education (DOED)
REU Site: Nanoscale Science Undergraduate Research Experience (NanoSURE) at UNC Charlotte	\$60,000	Principal Investigator (PI): Schmedake, Thomas Co-PI: Brown, Banita	Chemistry	Sponsor: National Science Foundation (NSF)
Science of Security Lablet	\$144,823	Principal Investigator (PI): Al-Shaer, Ehab	Software and Information Systems	Sponsor: North Carolina State University (NCSSU) Prime Sponsor: Department of Defense (DOD National Security Agency (NSA)

Stabilize and Immobilize FGD Waste Water and ZLD Solids: Cost-Effectiveness Indicator Study	\$49,452	Principal Investigator (PI): Ogunro, Vincent Co-PIs: Tempest, Brett; Daniels, John	Civil and Environmental Engineering	Sponsor: Southern Company
Stories of Slavery, Stories for Children	\$1,500	Principal Investigator (PI): Connolly, Paula	English	Sponsor: Boston Athenaeum
Student Support Services Program	\$259,651	Principal Investigator (PI): Blat, Catherine Co-PI: Lucas, Mary	University Center for Academic Excellence	Sponsor: Department of Education (DOED)
Technology Budget	\$38,759	Principal Investigator (PI): McAllister, George	Small Business Technology Development Center (SBTDC)	Sponsor: North Carolina Small Business and Technology Development Center (NC SBTDC) Prime Sponsor: Small Business Administration
The effect of isometric exercise on the regulation of blood glucose	\$1,200	Principal Investigator (PI): Marino, Joseph	Kinesiology	Sponsor: Nova Biomedical Corporation
UPRM-CREST Evaluation	\$12,000	Principal Investigator (PI): Dika, Sandra	Educational Leadership	Sponsor: University of Puerto Rico Mayaguez Campus Prime Sponsor: National Science Foundation (NSF)
Water repellency for ash containment and reuse	\$93,369	Principal Investigator (PI): Daniels, John Co-PIs: Pando, Miguel; Ogunro, Vincent	Civil and Environmental Engineering	Sponsor: Environmental Research and Education Foundation
What do Healthy, Unhealthy, and Abusive Relationships look like? Listening to Diverse Communities in Charlotte-Mecklenburg County.	\$5,000	Principal Investigator (PI): Kulkarni, Shanti	Social Work	Sponsor: Charlotte Mecklenburg County
Wide Spectral Band Laser Threat Sensor	\$15,006	Principal Investigator (PI): Suleski, Thomas Co-PI: Boreman, Glenn	Physics and Optical Science	Sponsor: Nanohmics, Inc. Prime Sponsor: Department of Defense (DOD) Department of the Navy (DN)