

October 17, 2013

The Office of Research and Economic Development is pleased to announce awards received by UNC Charlotte Researchers in the month of September, 2013.

Total amount awarded for the month of September was \$6,177,583

Fiscal Year To Date Total: \$14,671,614

Award Title	Amount	Investigators	Lead PI Dept.	Sponsors
2013-2014 Charlotte-Mecklenburg Quality of Life Study	\$46,703	Lead PI: Furuseth, Owen Co-PIs: Simmons, Laura; McCoy, William;	Metropolitan Studies and Extended Academic Programs	Sponsor: City of Charlotte
2014 NC Junior Science and Humanities Symposium Competition	\$21,000	Lead PI: Wickliff, Alisa Co-PIs: Pugalee, David	Center for STEM Education	Sponsor: Academy of Applied Sciences Prime Sponsor: Army Research Laboratory (ARL)
3D Meta-Optics for High Energy Lasers	\$275,757	Lead PI: Boreman, Glenn	Physics and Optical Science	Sponsor: DOD/Air Force/Office of Scientific Research
A Comparative Study of Ethnic Entrepreneurship in the U. S. Immigration Gateways	\$33,593	Lead PI: Wang, Qingfang	Geography and Earth Sciences	Sponsor: National Science Foundation (NSF)
A parallel Poisson/Helmholtz solver using local boundary integral equation and random walk methods	\$140,000	Lead PI: Cai, Wei	Mathematics and Statistics	Sponsor: National Science Foundation (NSF)
Acquisition of an ESI Mass Spectrometer Multiple Users in Chemistry, Biology and Environmental Engineering (HPLC/ESI-MS System for the Analysis of Strategic Chemical Species)	\$266,955	Lead PI: Ogle, Craig Co-PIs: Troutman, Jerry; Daniels, John; Mukherjee, Pinku;	Chemistry	Sponsor: National Science Foundation (NSF)
Analysis and Design of Non-Foster Circuits for Conformal Metamaterial Antenna Design	\$10,000	Lead PI: Adams, Ryan	Electrical and Computer Engineering	Sponsor: CUNY Center for Metamaterials

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Assessment Practices to Support Mathematics Learning and Understanding for Students (APLUS)	\$267,645	Lead PI: Pugalee, David	Center for STEM Education	Sponsor: Kannapolis City Schools Prime Sponsor: North Carolina Department of Public Instruction (NCDPI)
Assessment Practices to Support Mathematics Learning and Understanding for Students (APLUS)	\$74,100	Lead PI: Wang, Chuang	Educational Leadership	Sponsor: Kannapolis City Schools Prime Sponsor: North Carolina Department of Public Instruction (NCDPI)
Beliefs of Effective Foreign Language Teachers	\$500	Lead PI: Kissau, Scott	Middle, Secondary and K-12 Education	Sponsor: Foreign Language Association of North Carolina (FLANC)
Capacity Building: Collaborative Research: Integrated Learning Environment for Cyber Security of Smart Grid	\$215,241	Lead PI: Wang, Weichao	Software and Information Systems	Sponsor: National Science Foundation (NSF)
Charlotte Ankle Sprain Tracking Study (CASTS)	\$48,875	Lead PI: Wikstrom, Erik Co-PIs: Turner, Tricia	Kinesiology	Sponsor: National Athletic Trainers Association (NATA) Research and Education Foundation
CISE REU Evaluation Toolkit Expansion Project	\$149,999	Lead PI: Rorrer, Audrey	Computer Science	Sponsor: National Science Foundation (NSF)
Collaborative Research: RCN: Integrative Pollen Biology	\$8,883	Lead PI: Lorraine, Ann	Bioinformatics and Genomics	Sponsor: National Science Foundation (NSF)
Collaborative: I/UCRC: Center for free form optics	\$240,000	Lead PI: Davies, Angela	Physics and Optical Science	Sponsor: National Science Foundation (NSF)
Cooperative Research Initiative for Dynamic, Modular, and Multi-Axis Nano-Mechanical Measurements	\$143,263	Lead PI: Smith, Stuart	Mechanical Engineering and Engineering Science	Sponsor: National Institute of Science and Technology (NIST)

Award Title	Amount	Investigators	Lead PI Dept.	Sponsors
CyberSEES: Type 2: A Multidisciplinary Approach to Formal, Visual and Interactive Analytics for Automated Diagnosis and Prognostication for Sustainable Civil Infrastructure	\$563,000	Lead PI: Al-Shaer, Ehab Co-PIs: Maher, Mary; Whelan, Matthew; Wang, Xiaoyu;	Software and Information Systems	Sponsor: National Science Foundation (NSF)
Development of High Performance PBI Polymers and Their Composites	\$4,869	Lead PI: Zhou, Aixi	Engineering Technology and Construction Management	Sponsor: PBI Performance Products, Inc.
Development of Next Generation Stabilization Agents for Cell-based Therapeutics	\$339,050	Lead PI: Elliott, Gloria	Mechanical Engineering and Engineering Science	Sponsor: NIH National Institute of General Medical Sciences (NIGMS)
DoD Carolina Cyber Defender Scholarship	\$2,599	Lead PI: Chu, Bei-Tseng	Software and Information Systems	Sponsor: NSA Office of the Director of National Intelligence (ODNI)
EAGER: Toward Automated Integration of Moving Target Defense Techniques	\$149,999	Lead PI: Al-Shaer, Ehab	Software and Information Systems	Sponsor: National Science Foundation (NSF)
EARS: Accelerating Spectrum Access in Cognitive Radio Networks via Social Analysis of Secondary Users	\$600,000	Lead PI: Xie, Jiang Co-PIs: Cao, Yang; Wang, Yu;	Electrical and Computer Engineering	Sponsor: National Science Foundation (NSF)
Evaluation of Bright Beginnings Pre-Kindergarten Program for the Charlotte Mecklenburg Schools	\$185,000	Lead PI: Kilmer, Ryan Co-PIs: Cook, James	Psychology	Sponsor: Charlotte Mecklenburg Schools
Family Violence Prevention and Services	\$26,000	Lead PI: Kulkarni, Shanti	Social Work	Sponsor: North Carolina Department of Health and Human Services (NCDHHS)
Fiction Writing -- historical novel research	\$10,000	Lead PI: Parkison, Aimee	English	Sponsor: North Carolina Arts Council

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GEAR UP Day and GEAR UP Senior Day	\$4,714	Lead PI: Lopez, Samuel	Multicultural Academic Services	Sponsor: University of North Carolina General Administration (UNC GA) Prime Sponsor: US Department of Education (DOED)
I/UCRC for Sustainably Integrated Buildings and Sites	\$8,000	Lead PI: Cox, Robert	Electrical and Computer Engineering	Sponsor: National Science Foundation (NSF)
In-Situ measurement of blade tips for tip grinding	\$54,554	Lead PI: Morse, Edward	Mechanical Engineering and Engineering Science	Sponsor: Siemens Energy
IUCRC for Metamaterials	\$20,000	Lead PI: Fiddy, Michael	Physics and Optical Science	Sponsor: National Science Foundation (NSF)
Knight Foundation Donor Advised Fund City of Creeks	\$12,000	Lead PI: Newsom, Mary	Urban Institute	Sponsor: Foundation For The Carolinas (FFTC) Prime Sponsor: John S and James L Knight Foundation
Leadership Gift School project 2013-14	\$15,000	Lead PI: Caratao, Frederick	Urban Institute	Sponsor: Giving Matters, Inc. Prime Sponsor: The Institute for Philanthropic Leadership
Maximizing the Impact of ePHIM in Low-Income, Multiethnic Populations	\$13,732	Lead PI: Latulipe, Celine	Software and Information Systems	Sponsor: Wake Forest University Health Sciences Prime Sponsor: Agency for Healthcare Research and Quality (AHRQ)
Measurement and Reporting of Muffler IDs	\$65,664	Lead PI: Morse, Edward Co-PIs: Evans, Christopher	Mechanical Engineering and Engineering Science	Sponsor: Siemens Energy
Modelling and Analysis of Gene Duplication	\$49,188	Lead PI: Schlueter, Jessica	Bioinformatics and Genomics	Sponsor: University of Wyoming Prime Sponsor: National Science Foundation (NSF)

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Natural Resources and Conflict	\$263,168	Lead PI: Walsh, James	Political Science and Public Administration	Sponsor: Department of Defense (DOD)
NC New Teacher Support Program	\$166,840	Lead PI: McIntyre, Ellen	Deans Office College of Education	Sponsor: UNC GA Academic Affairs Prime Sponsor: DOED Office of Postsecondary Education
NC-LSAMP-Phase V	\$86,000	Lead PI: Brown, Banita	Deans Office College of Liberal Arts and Sciences	Sponsor: National Science Foundation (NSF)
NCMHD Advances in Health Disparities Research on Social Determinants of Health	\$106,645	Lead PI: Furuseh, Owen Co-PIs: Smith, Heather; Sorensen, Janni; Coffman, Maren;	Metropolitan Studies and Extended Academic Programs	Sponsor: Carolinas Medical Center Prime Sponsor: DHHS/NIH
North Carolina Teacher Corps Licensure Collaboration Project	\$177,436	Lead PI: Macon, Amanda	Deans Office College of Education	Sponsor: North Carolina Department of Public Instruction (NCDPI) Prime Sponsor: US Department of Education (DOED)
On the Development of a Virtual Patient with Mild Traumatic Brain Injury (TBI)	\$29,928	Lead PI: Wilson, Dale-Marie	Computer Science	Sponsor: Department of Veterans Affairs
Online learning platform for introducing clinicians and researchers to metabolomics	\$8,145	Lead PI: Du, Xiuxia	Bioinformatics and Genomics	Sponsor: University of North Carolina at Chapel Hill (UNC-CH) Prime Sponsor: National Institutes of Health (NIH)
Polymer-mediated gene and oligonucleotide delivery for muscular dystrophy	\$19,296	Lead PI: Schneider, Stanley	Biology	Sponsor: Carolinas Medical Center

Award Title	Amount	Investigators	Lead PI Dept.	Sponsors
Promoting Socio-Emotional and Behavioral Development In At-Risk Elementary Students: A Preventative Classroom-Based Multi-Level Intervention Model	\$37,642	Lead PI: Lo, Ya-yu	Special Education and Child Development	Sponsor: University of Cyprus (UCY) Prime Sponsor: European Commission
RCN-SEES: Predictive Modeling Network for Sustainable Human-Building Ecosystems (SHBE)	\$62,497	Lead PI: Tolone, William Co-PIs: Hadzikadic, Mirsad	Deans Office College of Computing and Informatics	Sponsor: University of North Texas System (UNT) Prime Sponsor: National Science Foundation (NSF)
Regularly Scheduled Acetaminophen Effect on Pain Behaviors in Long-Term Care Residents	\$350,000	Lead PI: Burfield, Allison	School of Nursing	Sponsor: Robert Wood Johnson Foundation (RWJF)
Siemens Large Manufacturing Solutions Laboratory (SLMSL)	\$288,000	Lead PI: Ziegert, John	Mechanical Engineering and Engineering Science	Sponsor: Hexagon Metrology
SREB Fellowship	\$16,926	Lead PI: Rubin, Beth	Public Policy	Sponsor: Southern Regional Education Board (SREB) Prime Sponsor: Bill and Melinda Gates Foundation
Stabilize and Immobilize FGD Waste Water and ZLD Solids: Cost-Effectiveness Indicator Study	\$106,638	Lead PI: Ogunro, Vincent Co-PIs: Daniels, John	Civil and Environmental Engineering	Sponsor: Southern Company
Training Provider PLC	\$8,075	Lead PI: Driscoll, Lisa	Educational Leadership	Sponsor: Educational Development Center, Inc. Prime Sponsor: Wallace Foundation
Travel Support: 9th International Symposium on Bioinformatics Research and Applications	\$20,000	Lead PI: Gibas, Cynthia Co-PIs: Su, ZhengChang	Bioinformatics and Genomics	Sponsor: National Science Foundation (NSF)

Award Title	Amount	Investigators	Lead PI Dept.	Sponsors
TWC: Small: Collaborative: Discovering Software Vulnerabilities through Interactive Static Analysis	\$249,112	Lead PI: Lipford, Heather Co-PIs: Chu, Bei-Tseng	Software and Information Systems	Sponsor: National Science Foundation (NSF)
University Engineering Design Challenge Program	\$20,000	Lead PI: Schmidt, Peter	Engineering Technology and Construction Management	Sponsor: Air Force Office of Scientific Research (AFOSR)
VASA: Visual Analytics for Security Analysis	\$75,000	Lead PI: Ribarsky, Martin	Computer Science	Sponsor: Purdue University Prime Sponsor: Department of Homeland Security (DHS)
WFUBMC Joint Appointment	\$19,352	Lead PI: Veach, Laura	Counseling	Sponsor: Wake Forest University
Women's Commission Needs Assessment	\$1,000	Lead PI: Kulkarni, Shanti	Social Work	Sponsor: Mecklenburg County Community Support Services