

September 23, 2014

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

Total amount awarded for the month of August was \$6,790,813

Fiscal Year To Date Total: \$10,337,326

Award Title	Amount	Investigators	PI Dept.	Sponsors
2013-2014 Charlotte-Mecklenburg Quality of Life Study	\$29,926	Principal Investigator (PI): Furuseth, Owen Co-PIs: Simmons, Laura; McCoy, William	Metropolitan Studies and Extended Academic Programs	Sponsor: City of Charlotte
2014 Immigrant Integration in Charlotte-Mecklenburg Report	\$35,821	Principal Investigator (PI): Caratao, Frederick	Urban Institute	Sponsor: City of Charlotte Neighborhood and Business Services
Advancing Dimensional Metrology for Intelligent Manufacturing with The Center for Precision Metrology	\$10,000	Principal Investigator (PI): Evans, Christopher Co-PI: Miller, Jimmie	Mechanical Engineering and Engineering Science	Sponsors: Department of Commerce (DOC) National Institute of Standards and Technology (NIST)
AFRL University Engineering Design Challenge Program	\$20,000	Principal Investigator (PI): Schmidt, Peter	Engineering Technology and Construction Management	Sponsor: Technology Service Corporation Prime Sponsors: Department of Defense (DOD) Department of Air Force (DAF) Air Force Office of Scientific Research (AFOSR)
An Investigation into the Performance of Magnetically Geared Devices for Marine Hydrokinetic and Wind Applications	\$388,508	Principal Investigator (PI): Bird, Jonathan	Electrical and Computer Engineering	Sponsor: National Science Foundation (NSF)
BPC-AE - Scaling the STARS Alliance: A National Community for Broadening Participation through Regional Partnerships	\$750,000	Principal Investigator (PI): Payton, Jamie Co-PIs: Rorrer, Audrey; Lipford, Heather; Buch, Kimberly	Computer Science	Sponsor: National Science Foundation (NSF)

Bristol Myers Squibb: Non-small cell lung cancer analysis Phase II	\$45,000	Principal Investigator (PI): Blanchette, Christopher	Deans Office, College of Health and Human Services	Sponsor: IMS Health
CCR Treatment 12	\$6,803	Principal Investigator (PI): Langley, William	Civil and Environmental Engineering	Sponsor: CH2M Hill, Inc.
Charlotte Mecklenburg Senior Center - Graduate Student Support	\$4,332	Principal Investigator (PI): Wikstrom, Erik	Kinesiology	Sponsor: Charlotte Mecklenburg Senior Center
Clean Fuel Advanced Technology Award	\$52,000	Principal Investigator (PI): Lizotte, Michael	Facilities Management	Sponsor: NCSU North Carolina Solar Center (NCSC) Prime Sponsor: North Carolina Department of Transportation (NCDOT)
Collaborative Research: ABI Innovation: Towards high performance flexible transcription factor-DNA docking	\$185,699	Principal Investigator (PI): Guo, Jun-tao	Bioinformatics and Genomics	Sponsor: National Science Foundation (NSF)
Collaborative Research: Autonomous Perception and Manipulation in Search and Rescue	\$80,000	Principal Investigator (PI): Xiao, Jing Co-PI: Akella, Srinivas	Computer Science	Sponsor: National Science Foundation (NSF)
Collaborative Research: Community College Roots of STEM: Interactive influences of individual, secondary school, and college factors predicting the success of underrepresented groups	\$1,498,603	Principal Investigator (PI): Stearns, Elizabeth Co-PIs: Bottia, Martha; Mickelson, Roslyn; Moller Smith, Stephanie	Sociology	Sponsor: National Science Foundation (NSF)
Collaborative Research: Improving the recruitment and persistence of women in the geosciences: Exploring deliberate mentoring approaches aimed at undergraduate students	\$260,389	Principal Investigator (PI): Clinton, Sandra	Geography and Earth Sciences	Sponsor: National Science Foundation (NSF)

Collaborative Research: Manufacturing of Complex Lenses for Thermal Imaging, Night Vision and Surveillance Systems	\$158,249	Principal Investigator (PI): Davies, Matthew	Mechanical Engineering and Engineering Science	Sponsor: National Science Foundation (NSF)
Comparison of C57BL/6 and chronic High Alcohol Preferring (cHAP) mice in acute and chronic models of ethanol consumption	\$32,002	Principal Investigator (PI): Richardson, Christine	Biological Sciences	Sponsor: Carolinas HealthCare System
Confidential	\$335,000	Principal Investigator (PI): Daniels, John Co-PIs: Louis, Garrick; Evans, Jeffrey; Tsuji, Joyce; Reddy, Krishna; Deacy, Robert; Jewell, Robert; Burns, Susan; Wolfe, William	Civil and Environmental Engineering	Sponsor: Confidential
Development of Next Generation Stabilization Agents for Cell-based Therapeutics	\$278,237	Principal Investigator (PI): Elliott, Gloria	Mechanical Engineering and Engineering Science	Sponsors: National Institutes of Health (NIH) National Institute of General Medical Sciences (NIGMS)
Development platform for FPGA-controlled, portable processing systems	\$76,420	Principal Investigator (PI): Noras, Maciej Co-PI: Browne, Aidan	Engineering Technology and Construction Management	Sponsors: Department of Defense (DOD) Department of Army (DA) Army Research Office (ARO)
EAGER: Collaborative Research: A Computational Model for Evaluating the Quality of Citizen Science Contributions.	\$97,300	Principal Investigator (PI): Maher, Mary Co-PI: Grace, Kazjon	Software and Information Systems	Sponsor: National Science Foundation (NSF)
Early Childhood Paraprofessional Preservice Professional Development Project	\$144,903	Principal Investigator (PI): Algozzine, Robert Co-PIs: D'Amico, Mark; Correa, Vivian	Educational Leadership	Sponsor: US Department of Education (DOED)

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	\$35,000	Principal Investigator (PI): Allan, Craig Co-PI: Chen, Gang	Geography and Earth Sciences	Sponsor: US Department of Agriculture (USDA) Forest Service Southern Research Station
Energy Performance Assessment Process for a Near Real-Time Dashboard: Task 2 - Metric and Dashboard Development	\$30,203	Principal Investigator (PI): Cox, Robert Co-PI: Futrell, Benjamin	Electrical and Computer Engineering	Sponsor: Geosyntec Consultants, Inc. Prime Sponsor: Department of Defense (DOD)
English Language Specialist Award to India Phase II May 2014	\$14,247	Principal Investigator (PI): Salas, Spencer	Middle, Secondary and K-12 Education	Sponsor: Georgetown University Prime Sponsor: Department of State (DOS)
English Language Specialist Award to Nepal May 2014	\$14,273	Principal Investigator (PI): Salas, Spencer	Middle, Secondary and K-12 Education	Sponsor: Georgetown University Prime Sponsor: Department of State (DOS)
Evaluation of Bioretention Media Mixes for Optimum Permeability and Contaminant Removal Capacity - Phase II	\$9,000	Principal Investigator (PI): Wu, Jy Co-PI: Guyer, Regina	Civil and Environmental Engineering	Sponsor: Faucette Consultants
Evaluation of Tensile Behavior of Aquafin 2K-M Flexible Waterproofing	\$3,500	Principal Investigator (PI): Young, David Co-PI: Park, Youngjin	Civil and Environmental Engineering	Sponsor: Corporate Construction Services, LLC,
Evaluation of the Relatives' On Ramp Program, Fiscal Year 2014-2015	\$28,816	Principal Investigator (PI): Haber, Mason	Psychology	Sponsor: Mecklenburg County, Behavioral Health Division

Finding the roots: interactive influences of individual, secondary school, and college institutional factors on the success of women and underrepresented minorities in STEM majors	\$56,101	Principal Investigator (PI): Stearns, Mary Co-PI: Mickelson, Roslyn	Sociology	Sponsor: National Science Foundation (NSF)
Flow Analysis Over Passenger Vehicle Spoilers	\$15,832	Principal Investigator (PI): Uddin, Mesbah	Mechanical Engineering and Engineering Science	Sponsor: Hyundai America Technical Center, Inc. (HATCI)
Improved Methods for Generator Rotor Trimming and Charting	\$16,159	Principal Investigator (PI): Ziegert, John Co-PI: Schmidt, Peter	Mechanical Engineering and Engineering Science	Sponsor: Siemens Energy
Kids in Parks	\$10,000	Principal Investigator (PI): Racine, Elizabeth	Public Health Sciences	Sponsor: University of North Carolina at Asheville (UNCA) Prime Sponsor: Blue Cross and Blue Shield of North Carolina
Maximizing the Impact of ePHIM in Low-Income, Multiethnic Populations	\$13,947	Principal Investigator (PI): Latulipe, Celine	Software and Information Systems	Sponsor: Wake Forest University Health Sciences Prime Sponsor: Agency for Healthcare Research and Quality (AHRQ)
National Science Foundation Graduate Research Fellowship Program	\$192,667	Principal Investigator (PI): Sell, Susan	Graduate School	Sponsor: National Science Foundation (NSF)
NC-LSAMP-Phase V	\$86,000	Principal Investigator (PI): Brown, Banita	Deans Office, College of Liberal Arts and Sciences	Sponsor: North Carolina Agricultural and Technical State University (NCAT) Prime Sponsor: National Science Foundation (NSF)

North Carolina New Teacher Support Program	\$75,350	Principal Investigator (PI): Macon, Amanda Co-PI: Mungo, Sequoya	Deans Office, College of Education	Sponsor: University of North Carolina General Administration (UNC GA) Prime Sponsor: Z Smith Reynolds Foundation
Ocean Energy Power Take-off Using Magnetic Gears - Year 4	\$305,000	Principal Investigator (PI): Bird, Jonathan Co-PI: Williams, Wesley	Electrical and Computer Engineering	Sponsor: UNC Coastal Studies Institute (UNC-CSI)
Personnel Preparation Program in Low Incidence Severe Disabilities	\$241,410	Principal Investigator (PI): Spooner, Fred Co-PI: Wood, Wendy	Special Education and Child Development	Sponsor: US Department of Education (DOED)
Precision Machining of Lens Assembly Components	\$10,168	Principal Investigator (PI): Davies, Matthew Co-PI: Owen, Joseph	Mechanical Engineering and Engineering Science	Sponsor: Magic Leap Inc.
Reducing Obesity in African American Women through Lifestyle Enhancement	\$8,641	Principal Investigator (PI): DeHaven, Mark	Public Health Sciences	Sponsor: University of North Texas Health Science Center at Forth Worth Prime Sponsor: National Institutes of Health (NIH) National Center on Minority Health and Health Disparities (NCMHD)
Formal Foundations for Wireless Network Agility	\$49,839	Principal Investigator (PI): Al-Shaer, Ehab	Software and Information Systems	Sponsor: Department of Defense (DOD) Department of Army (DA) Army Research Office (ARO)
Storage Integration Project	\$14,620	Principal Investigator (PI): Kamalasadan, Sukumar Co-PIs: Enslin, Johan; Cecchi, Valentina	Electrical and Computer Engineering	Sponsor: Duke Energy Corporation
Sustainable Responsivity: The integration of nanosolar multipurpose skin for built environment and mobility	\$15,000	Principal Investigator (PI): Azarbayjani, Mona Co-PI: Walter, Michael	School of Architecture	Sponsor: United States Environmental Protection Agency (EPA)

Testing the relationship between venom evolution and diet composition by using the sea anemone <i>Nematostella vectensis</i> , a cnidarian model	\$44,320	Principal Investigator (PI): Reitzel, Adam	Biological Sciences	Sponsor: US-Israel Binational Science Foundation
The Solutions Project: Teaching Students with Moderate/Severe Intellectual Disability to Solve Mathematical Problems	\$399,999	Principal Investigator (PI): Browder-Boswell, Diane Co-PIs: Polly, Andrew; Spooner, Fred; Lo, Ya-yu	Special Education and Child Development	Sponsor: US Department of Education (DOED)
UNC Charlotte's Ph.D. Program in Special Education with a Specialty in Multi-tiered Interventions	\$249,887	Principal Investigator (PI): Lo, Ya-yu Co-PI: Wood, Charles	Special Education and Child Development	Sponsor: US Department of Education (DOED)
University of North Carolina at Charlotte PhD Program 2014	\$249,998	Principal Investigator (PI): Browder-Boswell, Diane	Special Education and Child Development	Sponsor: US Department of Education (DOED)
Use of bioceramic nanoscaffolds to enhance irreversible electroporation for in situ tissue destruction	\$21,825	Principal Investigator (PI): El-Ghannam, Ahmed	Mechanical Engineering and Engineering Science	Sponsor: Carolina Medical Center
Visualization and Analysis of the Emergence, Evolution, and Spread of Pathogens	\$78,925	Principal Investigator (PI): Janies, Daniel Co-PI: Wang, Xiaoyu	Bioinformatics and Genomics	Sponsor: Ohio State University College of Medicine Prime Sponsor: Department of Defense (DOD) Defense Threat Reduction Agency (DTRA)
Wireless Vibration Monitoring of Hicks and Henry St. Bridge	\$10,894	Principal Investigator (PI): Whelan, Matthew	Civil and Environmental Engineering	Sponsor: WSP Group