

July 24, 2017

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

Total amount awarded for the month of June was \$6,413,561

Fiscal Year To Date Total: \$50,917,579

<b>Award Title</b>	<b>Amount</b>	<b>Investigators</b>	<b>PI Dept.</b>	<b>Sponsors</b>
<b>2017-2018 NC Coaching, Mentoring, Performance Evaluation and Professional Development for Birth through Kindergarten Licensed Teachers Employed in Nonpublic School Classrooms</b>	\$1,449,730	<b>Principal Investigator (PI):</b> Lambert, Richard <b>Co-PI:</b> Vestal, Amanda	Educational Leadership	<b>Sponsor:</b> North Carolina Department of Health and Human Services (NCDHHS) <b>Prime Sponsor:</b> Department of Health and Human Services (DHHS)
<b>ABI Development: Pathview: a systematic solution for pathway based analytics and visualization</b>	\$228,089	<b>Principal Investigator (PI):</b> Luo, Weijun	Bioinformatics Research Center	<b>Sponsor:</b> National Science Foundation (NSF)
<b>APLU IES Completion Grant</b>	\$60,000	<b>Principal Investigator (PI):</b> McEntire, Tina <b>Co-PI:</b> Ramstack, Kathryn	Enrollment Management	<b>Sponsor:</b> Association of Public and Land-grant Universities (APLU) <b>Prime Sponsor:</b> US Department of Education (DOED)
<b>CAREER: Plasmon-mediated photo-absorption and carrier recombination dynamics in semiconductor/metal hybrid nano-systems</b>	\$35,000	<b>Principal Investigator (PI):</b> Jones, Marcus	Chemistry	<b>Sponsor:</b> National Science Foundation (NSF)
<b>CISE Evaluation Toolkit Extension Project</b>	\$37,999	<b>Principal Investigator (PI):</b> Rorrer, Audrey	Deans Office College of Computing and Informatics	<b>Sponsor:</b> National Science Foundation (NSF)
<b>Collaborative Research on Fire and Structures Phase 1: Performance of Gels</b>	\$25,000	<b>Principal Investigator (PI):</b> Zhou, Aixi	Engineering Technology and Construction Management	<b>Sponsor:</b> Insurance Institute for Business and Home Safety
<b>Collaborative Research on Fire and Structures: Phase 2 of 2</b>	\$25,000	<b>Principal Investigator (PI):</b> Zhou, Aixi	Engineering Technology and Construction Management	<b>Sponsor:</b> Insurance Institute for Business and Home Safety

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<b>Collaborative Research: IUCRC Center for Configuration Analytics and Automation</b>	\$102,275	<b>Principal Investigator (PI):</b> Al-Shaer, Ehab <b>Co-PI:</b> Chu, Bei-Tseng	Software and Information Systems	<b>Sponsor:</b> National Science Foundation (NSF)
<b>Collaborative: I/UCRC: Center for free form optics</b>	\$60,000	<b>Principal Investigator (PI):</b> Davies, Matthew <b>Co-PI:</b> Suleski, Thomas	Mechanical Engineering and Engineering Science	<b>Sponsor:</b> National Science Foundation (NSF)
<b>Confidential</b>	\$42,520	<b>Principal Investigator (PI):</b> Hofmann, Tino	Physics and Optical Science	<b>Sponsor:</b> Confidential <b>Prime Sponsor:</b> Confidential
<b>Continued Maintenance and Development of Software: Integrated Genome Browser and the Genoviz SDK, Visualization Software for Next-Generation Genomics</b>	\$373,643	<b>Principal Investigator (PI):</b> Loraine, Ann	Bioinformatics and Genomics	<b>Sponsor:</b> National Institutes of Health (NIH) National Center for Research Resources (NCRR)
<b>Developing knowledge models to enable rapid learning in radiation therapy.</b>	\$208,747	<b>Principal Investigator (PI):</b> Ge, Yaorong	Software and Information Systems	<b>Sponsor:</b> Duke University Health System <b>Prime Sponsor:</b> National Institutes of Health (NIH)
<b>EAGER: MAKER: Making Prosthetics for Kids - Socially Relevant Making to Catalyze Diversity and Engagement in STEM Learning</b>	\$298,186	<b>Principal Investigator (PI):</b> Wilson, David <b>Co-PI:</b> Chi, Richard	Software and Information Systems	<b>Sponsor:</b> National Science Foundation (NSF)
<b>Energy Performance Assessment Process for a Near Real-Time Dashboard: Task 5 - Implementation &amp; Reporting</b>	\$108,246	<b>Principal Investigator (PI):</b> Cox, Robert	Electrical and Computer Engineering	<b>Sponsor:</b> Geosyntec Consultants, Inc. <b>Prime Sponsor:</b> Department of Defense (DOD)
<b>Enhancing summer research opportunities for low-income high school students</b>	\$2,490	<b>Principal Investigator (PI):</b> Schmedake, Thomas	Chemistry	<b>Sponsor:</b> North Carolina State University (NCSU) <b>Prime Sponsor:</b> National Aeronautics and Space Administration (NASA)
<b>Fire Ember Production from Wildland and Structural Fuels</b>	\$15,946	<b>Principal Investigator (PI):</b> Zhou, Aixi	Engineering Technology and Construction Management	<b>Sponsor:</b> Joint Fire Science Program (JFSP)

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<b>GIS Internship with the Episcopal Diocese of North Carolina</b>	\$5,272	<b>Principal Investigator (PI):</b> Clinton, Sandra <b>Co-PI:</b> Delmelle, Eric	Geography and Earth Sciences	<b>Sponsor:</b> Episcopal Diocese of North Carolina
<b>Healthy Partnerships for Active Living (PALS) FY 17-18</b>	\$10,000	<b>Principal Investigator (PI):</b> Gavarkavich, Diane	Urban Institute	<b>Sponsor:</b> Cabarrus Health Alliance
<b>How Much Are We Spending on Election Administration? A Proposal to Find Local Election Administration Finance Data and Election Outcomes</b>	\$19,895	<b>Principal Investigator (PI):</b> Mohr, Zachary <b>Co-PI:</b> Kropf, Martha	Political Science and Public Administration	<b>Sponsor:</b> MIT Election Data and Science Lab
<b>HRSA Scholarships for Disadvantaged Students - Behavioral Health Scholars Program</b>	\$542,682	<b>Principal Investigator (PI):</b> Herman-Smith, Robert	School of Social Work	<b>Sponsor:</b> Health Resources and Services Administration (HRSA)
<b>Investigation of the Interaction of Multiple Infrared Filters with Long Wavelength Infrared Spectra of Explosives and Interferents</b>	\$140,000	<b>Principal Investigator (PI):</b> Aggarwal, Ishwar <b>Co-PIs:</b> Poutous, Menelaos; Hutchens, Thomas	Physics and Optical Science	<b>Sponsor:</b> Department of Defense (DOD) Department of the Navy (DN) Office of Naval Research (ONR)
<b>K-5 SITE Summer Science Institute</b>	\$25,000	<b>Principal Investigator (PI):</b> Wickliff, Alisa	Center for STEM Education	<b>Sponsor:</b> Charlotte Mecklenburg Schools
<b>Kinematics of the Knee following ACL Reconstruction with BPTB and HS tendon Grafts</b>	\$600	<b>Principal Investigator (PI):</b> Zheng, Naiquan	Mechanical Engineering and Engineering Science	<b>Sponsor:</b> OrthoCarolina Research Institute (OCRI)
<b>Laboratory Testing of Braced Post (Composite) Insulators to Determine 3D Load-Carrying Capacities</b>	\$49,000	<b>Principal Investigator (PI):</b> Young, David	Civil and Environmental Engineering	<b>Sponsor:</b> Electric Power Research Institute (EPRI)
<b>LCS International Film Festival - Tournees</b>	\$2,200	<b>Principal Investigator (PI):</b> Bissiere, Michele <b>Co-PI:</b> LaMarca, Mary	Languages and Culture Studies	<b>Sponsor:</b> French American Cultural Exchange (FACE)
<b>Mineta National Transportation Research Consortium (MNTRC)</b>	\$149,934	<b>Principal Investigator (PI):</b> Pulugurtha, Srinivas <b>Co-PIs:</b> Hauser, Edwin; Duddu, Venkata Ramana	Civil and Environmental Engineering	<b>Sponsor:</b> San Jose State University <b>Prime Sponsor:</b> US Department of Transportation (DOT)

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<b>Modeling Persuasion and Group Behavior in Big Data</b>	\$30,000	<b>Principal Investigator (PI):</b> Shaikh, Samira	Computer Science	<b>Sponsor:</b> National Consortium for Data Science
<b>MPA Public Service fellowship with Habitat for Humanity Charlotte</b>	\$26,399	<b>Principal Investigator (PI):</b> Barth, Thomas	Political Science and Public Administration	<b>Sponsor:</b> Habitat for Humanity Charlotte
<b>NC2ML II: Design and research related to implementation of revised K-12 math standards for NC DPI Mathematics Section</b>	\$55,078	<b>Principal Investigator (PI):</b> McCulloch, Allison <b>Co-PI:</b> Stephan, Michelle	Mathematics and Statistics	<b>Sponsor:</b> University of North Carolina at Greensboro (UNCG) <b>Prime Sponsor:</b> North Carolina Department of Public Instruction (NCDPI)
<b>Near-Zero Power Integrated Circuits</b>	\$200,867	<b>Principal Investigator (PI):</b> Holleman, Jeremy	Electrical and Computer Engineering	<b>Sponsor:</b> University of Tennessee at Knoxville (UTK) <b>Prime Sponsor:</b> Department of Defense (DOD) Defense Advanced Research Projects Agency (DARPA)
<b>Nurse Anesthesia Traineeship, UNC Charlotte</b>	\$31,198	<b>Principal Investigator (PI):</b> Langford, David	School of Nursing	<b>Sponsor:</b> Health Resources and Services Administration (HRSA)
<b>Operating FLEX engines on other than ULS fuel</b>	\$92,511	<b>Principal Investigator (PI):</b> Uddin, Mesbah <b>Co-PIs:</b> Tkacik, Peter; Bari, Saiful	Mechanical Engineering and Engineering Science	<b>Sponsor:</b> Electric Power Research Institute (EPRI)
<b>Phase II CfM Industry Membership Funds</b>	\$685,000	<b>Principal Investigator (PI):</b> Aggarwal, Ishwar	Physics and Optical Science	<b>Sponsor:</b> All Other Business and Industry
<b>Phaseless inverse scattering problems for imaging of nano structures</b>	\$57,143	<b>Principal Investigator (PI):</b> Klibanov, Michael <b>Co-PI:</b> Nguyen, Loc	Mathematics and Statistics	<b>Sponsor:</b> Department of Defense (DOD) Department of the Navy (DN) Office of Naval Research (ONR)
<b>Polynomials in algebraic and topological combinatorics</b>	\$42,000	<b>Principal Investigator (PI):</b> Heteyi, Gabor	Mathematics and Statistics	<b>Sponsor:</b> Simons Foundation
<b>Process chains for cost effective production of glass freeform optics</b>	\$34,800	<b>Principal Investigator (PI):</b> Davies, Matthew <b>Co-PIs:</b>	Mechanical Engineering and Engineering Science	<b>Sponsor:</b> University of Rochester <b>Prime Sponsor:</b> All Other Business and Industry

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		Owen, Joseph; Suleski, Thomas		
<b>Regional EC Education Consultant and State Performance Plan Consultant</b>	\$358,377	<b>Principal Investigator (PI):</b> Anderson, Kelly	Special Education and Child Development	<b>Sponsor:</b> North Carolina Department of Public Instruction (NCDPI) <b>Prime Sponsor:</b> US Department of Education (DOED)
<b>Regulation of floral growth and patterning in Arabidopsis thaliana</b>	\$31,702	<b>Principal Investigator (PI):</b> Loraine, Ann	Bioinformatics and Genomics	<b>Sponsor:</b> University of South Carolina (USC) <b>Prime Sponsor:</b> National Science Foundation (NSF)
<b>REU Site: Nanoscale Science Undergraduate Research Experience (NanoSURE) at UNC Charlotte</b>	\$35,000	<b>Principal Investigator (PI):</b> Schmedake, Thomas <b>Co-PIs:</b> Brown, Banita; Gartlan, Scott	Chemistry	<b>Sponsor:</b> National Science Foundation (NSF)
<b>SBIR: Optimal Rewarming Solutions for Cryopreserved Tissue Systems</b>	\$101,739	<b>Principal Investigator (PI):</b> Elliott, Gloria <b>Co-PIs:</b> Clemens, Mark; Wang, Shangping	Mechanical Engineering and Engineering Science	<b>Sponsor:</b> TDA Research, Inc. <b>Prime Sponsor:</b> Department of Defense (DOD)
<b>Scattering, inverse scattering problems and non-linear integrable equations</b>	\$42,000	<b>Principal Investigator (PI):</b> Vainberg, Boris	Mathematics and Statistics	<b>Sponsor:</b> Simons Foundation
<b>Set-theoretic methods and the study of compact spaces</b>	\$60,012	<b>Principal Investigator (PI):</b> Dow, Alan	Mathematics and Statistics	<b>Sponsor:</b> National Science Foundation (NSF)
<b>Statistical Methods in HIV Vaccine Efficacy Trials</b>	\$90,463	<b>Principal Investigator (PI):</b> Sun, Yanqing	Mathematics and Statistics	<b>Sponsor:</b> Fred Hutchinson Cancer Research Center <b>Prime Sponsor:</b> National Institutes of Health (NIH) National Institute of Allergy and

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				Infectious Diseases (NIAID)
<b>Status Cues, Status Biases, and Interaction</b>	\$128,329	<b>Principal Investigator (PI):</b> Webster, Murray <b>Co-PI:</b> Walker, Lisa	Sociology	<b>Sponsor:</b> National Science Foundation (NSF)
<b>Streaming Query User Interface</b>	\$9,767	<b>Principal Investigator (PI):</b> Dou, Wenwen	Computer Science	<b>Sponsor:</b> Battelle Pacific Northwest Laboratories <b>Prime Sponsor:</b> Department of Energy (DOE)
<b>Strengthening Survivor-Centered Services through Focused Training, Evaluation, and Partnership</b>	\$35,000	<b>Principal Investigator (PI):</b> Kulkarni, Shanti	School of Social Work	<b>Sponsor:</b> Charlotte Mecklenburg County
<b>STTR: Novel OSINT Platform for Enhanced OSINT Collection</b>	\$43,750	<b>Principal Investigator (PI):</b> Tolone, William	Deans Office College of Computing and Informatics	<b>Sponsor:</b> Zeuss, Inc. <b>Prime Sponsor:</b> Department of Defense (DOD) Department of the Army (DA) Army Research Office (ARO)
<b>STTR: STTR Phase I:Video Collaboratory: Team-Based Learning and Collaboration with Video Documents</b>	\$67,500	<b>Principal Investigator (PI):</b> Collins, Devin <b>Co-PIs:</b> Latulipe, Celine; Wilson, David; Huskey, Sybil	Ventureprise	<b>Sponsor:</b> Video Collaboratory, LLC <b>Prime Sponsor:</b> National Science Foundation (NSF)
<b>Sugar Creek Charter School TIMS Computerized Bus Routing Project 2017-18</b>	\$2,700	<b>Principal Investigator (PI):</b> Pressley, JoAnne	Urban Institute	<b>Sponsor:</b> Sugar Creek Charter School
<b>Take Ten Initiative Part 2</b>	\$7,560	<b>Principal Investigator (PI):</b> Gavarkavich, Diane	Urban Institute	<b>Sponsor:</b> City of Charlotte <b>Prime Sponsor:</b> John S and James L Knight Foundation
<b>Technology-Rich Units for Future Secondary Teachers: Forging Mathematical Connections Through the Geometry of Functions</b>	\$7,570	<b>Principal Investigator (PI):</b> McCulloch, Allison	Mathematics and Statistics	<b>Sponsor:</b> North Carolina State University (NCSSU) <b>Prime Sponsor:</b>

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				National Science Foundation (NSF)
<b>Toxin expression and function by an estuarine model species in a dynamic seasonal community</b>	\$34,403	<b>Principal Investigator (PI):</b> Reitzel, Adam	Biological Sciences	<b>Sponsor:</b> National Science Foundation (NSF)
<b>Understanding the complexity of the transcriptomes in E. coli K12</b>	\$28,739	<b>Principal Investigator (PI):</b> Su, ZhengChang	Bioinformatics and Genomics	<b>Sponsor:</b> National Institutes of Health (NIH) National Institute of General Medical Sciences (NIGMS)
<b>University of Puerto Rico - Mayaguez CREST Evaluation, continuing</b>	\$6,500	<b>Principal Investigator (PI):</b> Dika, Sandra	Educational Leadership	<b>Sponsor:</b> University of Puerto Rico Mayaguez Campus <b>Prime Sponsor:</b> National Science Foundation (NSF)
<b>Wideband contactless current sensors</b>	\$50,000	<b>Principal Investigator (PI):</b> Parkhideh, Babak	Electrical and Computer Engineering	<b>Sponsor:</b> National Science Foundation (NSF)