

October 22, 2018

The Office of Research and Economic Development is pleased to announce awards received by UNC Charlotte Researchers in the month of September, 2018.

*Total amount awarded for the month of September was \$10,690,458      Fiscal Year To Date Total: \$20,881,615*

<b>Award Title</b>	<b>Amount</b>	<b>Investigators</b>	<b>PI Dept.</b>	<b>Sponsors</b>
<b>2018-2019 Charlotte-Mecklenburg Quality of Life Study (County)</b>	\$20,000	<b>Principal Investigator (PI):</b> Simmons, Laura <b>Co-PI:</b> Zager, Kathryn	Urban Institute	<b>Sponsor:</b> Mecklenburg County Managers Office
<b>5E Model Professional Development in Science Education for Special Educators</b>	\$43,793	<b>Principal Investigator (PI):</b> Wakeman, Shawnee <b>Co-PI:</b> Pugalee, David	Special Education and Child Development	<b>Sponsor:</b> University of Kansas <b>Prime Sponsor:</b> US Department of Education (DOED)
<b>A Comparative Study of Language Teacher Emotional Labor</b>	\$17,868	<b>Principal Investigator (PI):</b> Miller, Elizabeth	English	<b>Sponsor:</b> Fulbright Scholar Program
<b>Adoptive cell therapy against triple negative breast cancer using a novel tMUC1 antibody derived CAR</b>	\$1,113,487	<b>Principal Investigator (PI):</b> Mukherjee, Pinku	Biological Sciences	<b>Sponsor:</b> DOD DA Army Medical Research Acquisition Activity
<b>African Diaspora Collective Action: Rituals, Runaways, and the Haitian Revolution</b>	\$45,000	<b>Principal Investigator (PI):</b> Eddins, Crystal	Africana Studies	<b>Sponsor:</b> Brown University Center for the Study of Slavery and Justice
<b>Aquatic Cellular Biomarker Projects</b>	\$30,935	<b>Principal Investigator (PI):</b> Ringwood, Amy	Biological Sciences	<b>Sponsor:</b> TDI-Brooks International, Inc.
<b>Autonomous Robot Swarms for Urban Coverage</b>	\$272,580	<b>Principal Investigator (PI):</b> Akella, Srinivas <b>Co-PI:</b> Shin, Min	Computer Science	<b>Sponsor:</b> DOD Defense Advanced Research Projects Agency (DARPA)
<b>Bridges Fellow Program: Promoting Undergraduate Success and Graduation in Biomedical Sciences</b>	\$208,824	<b>Principal Investigator (PI):</b> Richardson, Christine <b>Co-PIs:</b>	Biological Sciences	<b>Sponsor:</b> National Institutes of Health (NIH)

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		Stearns, Mary; Bates, Tonya		
<b>Building Healthy Lifestyles from All Directions</b>	\$130,444	<b>Principal Investigator (PI):</b> Racine, Elizabeth <b>Co-PI:</b> Ledford, Meredith	Public Health Sciences	<b>Sponsor:</b> Cabarrus Partnership for Children
<b>Characterization of various multifunctional nucleic acid nanoparticles and understanding their immunotoxicity</b>	\$348,277	<b>Principal Investigator (PI):</b> Afonin, Kirill <b>Co-PIs:</b> Marriott, Ian; Johnson, Morgan	Chemistry	<b>Sponsor:</b> National Institutes of Health (NIH)
<b>Chemoenzymatic preparation of tagged bactoprenyl diphosphate linked sugar probes for in vitro and cellular elucidation of complex bacterial polysaccharides</b>	\$33,270	<b>Principal Investigator (PI):</b> Troutman, Jerry <b>Co-PI:</b> Reid, Amanda	Chemistry	<b>Sponsor:</b> National Institutes of Health (NIH)
<b>Collaborative Research: I/UCRC for Robots and Sensors for the Human Well-being</b>	\$65,000	<b>Principal Investigator (PI):</b> Xiao, Jing <b>Co-PI:</b> Akella, Srinivas	Computer Science	<b>Sponsor:</b> National Science Foundation (NSF)
<b>CRII: CSR: Partitioning Large Graphs in Deep Storage Architecture</b>	\$168,201	<b>Principal Investigator (PI):</b> Dai, Dong	Computer Science	<b>Sponsor:</b> National Science Foundation (NSF)
<b>Development of a Compact Ionic Polymer Transducing Wall Shear Stress Sensor for High Resolution Measurements in Unsteady Flows</b>	\$20,000	<b>Principal Investigator (PI):</b> Hewlin, Rodward	Engineering Technology and Construction Management	<b>Sponsor:</b> North Carolina Space Grant Consortium (NC Space Grant) <b>Prime Sponsor:</b> NASA National Space Grant College and Fellowship Program
<b>Displace, Return, and Reconstruct: Population Movement and Resilience to Instability</b>	\$243,213	<b>Principal Investigator (PI):</b> Walsh, James <b>Co-PI:</b> Thill, Jean-Claude	Political Science and Public Administration	<b>Sponsor:</b> Department of Defense (DOD)

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<b>Engaging Military Veterans to Increase Engineering Enrollment and B/S, M/S, and PhD Degrees Awarded</b>	\$250,000	<b>Principal Investigator (PI):</b> Tkacik, Peter <b>Co-PIs:</b> Lim, Jae Hoon; Tarbutton, Joshua; Goudarzi, Navid; Keanini, Russell	Mechanical Engineering and Engineering Science	<b>Sponsor:</b> DOD DN Office of Naval Research (ONR)
<b>EPIC Affiliates Industry Memberships for seed funded projects.</b>	\$100,000	<b>Principal Investigator (PI):</b> Kopitopoulou, Christina	Energy Production and Infrastructure Center	<b>Sponsor:</b> Energy Production and Infrastructure Center (EPIC) Affiliates Industry Members
<b>Evaluating a simple nanochemistry for lineage-targeted drug delivery</b>	\$439,500	<b>Principal Investigator (PI):</b> Egusa, Shunji	Physics and Optical Science	<b>Sponsor:</b> National Institutes of Health (NIH)
<b>Evaluation Plan for Charlotte NEXT</b>	\$6,500	<b>Principal Investigator (PI):</b> Gavarkavich, Diane <b>Co-PI:</b> Gaines, Angelique	Urban Institute	<b>Sponsor:</b> MeckEd
<b>Exploring Entangled Histories:Â Britain and Europe in the Age of the Thirty Years' War, c.1590-1650 - Spring Conference Application</b>	\$806	<b>Principal Investigator (PI):</b> Anderson, Amanda	History	<b>Sponsor:</b> Folger Shakespeare Library
<b>FW-HTF Theme 1: Future of Firefighting and Career Training - Advancing Cognitive, Communication, and Decision Making Capabilities of Firefighters</b>	\$1,494,976	<b>Principal Investigator (PI):</b> Lu, Aidong <b>Co-PIs:</b> Zhou, Aixi; Zhao, Wei; Wang, Weichao	Computer Science	<b>Sponsor:</b> National Science Foundation (NSF)
<b>Modulated Tool-Path Chip Breaking for Finish Machining</b>	\$199,998	<b>Principal Investigator (PI):</b> Schmitz, Tony	Mechanical Engineering and Engineering Science	<b>Sponsor:</b> Consolidated Nuclear Security , LLC (CNS) <b>Prime Sponsor:</b> Department of Energy (DOE)
<b>MRI: Development of an in-situ controlled Atomic Layer Deposition Tool (iCALD) for the Preparation of 3D Photonic Materials with Ultrahigh Aspect Ratios</b>	\$440,546	<b>Principal Investigator (PI):</b> Hofmann, Tino <b>Co-PIs:</b> Aggarwal, Ishwar; Poutous, Menelaos;	Physics and Optical Science	<b>Sponsor:</b> National Science Foundation (NSF)

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		Suleski, Thomas; Zhang, Yong		
<b>National Technical Assistance Center on Increasing Graduation and Improving Transition to Postsecondary Education and Careers for students with Disabilities</b>	\$2,100,000	<b>Principal Investigator (PI):</b> Test, David <b>Co-PI:</b> Fowler, Catherine	Special Education and Child Development	<b>Sponsor:</b> US Department of Education (DOED)
<b>NSF Center for Metamaterials Phase II</b>	\$123,699	<b>Principal Investigator (PI):</b> Aggarwal, Ishwar <b>Co-PIs:</b> Adams, Ryan; Hofmann, Tino	Physics and Optical Science	<b>Sponsor:</b> National Science Foundation (NSF)
<b>Operating FLEX engines on other than ULS fuel</b>	\$83,506	<b>Principal Investigator (PI):</b> Uddin, Mesbah	Mechanical Engineering and Engineering Science	<b>Sponsor:</b> Electric Power Research Institute (EPRI)
<b>Phase II I/UCRC UNC Charlotte: Center for Freeform Optics</b>	\$102,467	<b>Principal Investigator (PI):</b> Suleski, Thomas <b>Co-PI:</b> Falaggis, Konstantinos	Physics and Optical Science	<b>Sponsor:</b> National Science Foundation (NSF)
<b>Promoting Teacher Use of the Support Intensity Scale-Children's Version to Engage in Supports Planning to Enhance Access to the General Education Curriculum for Children with Intellectual Disability</b>	\$84,480	<b>Principal Investigator (PI):</b> Walker, Virginia	Special Education and Child Development	<b>Sponsor:</b> University of Kansas <b>Prime Sponsor:</b> US Department of Education (DOED)
<b>QCity Dance</b>	\$10,000	<b>Principal Investigator (PI):</b> Dils, Ann	Department of Dance	<b>Sponsor:</b> City of Charlotte Arts and Science Council
<b>Real-Time Analysis with Visual Analytics for Enhanced Decision-Making and Situational Awareness in Modern Power Systems</b>	\$299,237	<b>Principal Investigator (PI):</b> Cecchi, Valentina <b>Co-PIs:</b> Cho, Isaac; Hong, Tao; Wartell, Zachary	Electrical and Computer Engineering	<b>Sponsor:</b> National Science Foundation (NSF)

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<b>SBIR: Fringe Projection for Metal Additive Manufacturing (Phase I)</b>	\$15,000	<b>Principal Investigator (PI):</b> Falaggis, Konstantinos	Mechanical Engineering and Engineering Science	<b>Sponsor:</b> Universal Technology Corporation <b>Prime Sponsor:</b> National Aeronautics and Space Administration (NASA)
<b>SCC: Building Safe and Secure Communities through Realtime Edge Video Analytics</b>	\$1,897,466	<b>Principal Investigator (PI):</b> Tabkhivayghan, Hamed <b>Co-PIs:</b> Ravindran, Arun; Shoemaker, Douglas; Reid, Shannon; Pulugurtha, Srinivas	Electrical and Computer Engineering	<b>Sponsor:</b> National Science Foundation (NSF)
<b>Secure Coding Workshop</b>	\$91,996	<b>Principal Investigator (PI):</b> Lipford, Heather <b>Co-PI:</b> Chu, Bei-Tseng	Software and Information Systems	<b>Sponsor:</b> DOD National Security Agency (NSA)
<b>SIEMENS #FUTUREMAKERS FELLOWSHIP</b>	\$72,841	<b>Principal Investigator (PI):</b> Tarbutton, Joshua <b>Co-PI:</b> Wartell, Zachary	Mechanical Engineering and Engineering Science	<b>Sponsor:</b> Siemens Corporate Technology
<b>Tailoring Mg-alloy System through Composition/Microstructure/Severe Plastic Deformation for Army Extreme Dynamic Environment Applications</b>	\$25,661	<b>Principal Investigator (PI):</b> Wei, Qiuming	Mechanical Engineering and Engineering Science	<b>Sponsor:</b> Johns Hopkins University <b>Prime Sponsor:</b> DOD DA Army Research Laboratory (ARL)
<b>Training Paraprofessionals to Implement FCT with Students with Autism Who Use AAC</b>	\$29,465	<b>Principal Investigator (PI):</b> Walker, Virginia	Special Education and Child Development	<b>Sponsor:</b> Organization for Autism Research (OAR)
<b>Vocabulary CHAAOS: Creating Habits that Accelerate Academic language Of Students</b>	\$61,422	<b>Principal Investigator (PI):</b> Beach, Kristen	Special Education and Child Development	<b>Sponsor:</b> University of California at Riverside (UCR) <b>Prime Sponsor:</b> DOED Institute of Education Sciences (IES)