March 21, 2019

The Office of Research and Economic Development is pleased to announce awards received by UNC Charlotte Researchers in the month of February 2019.

Total amount awarded for the month of February was \$4,006,490

Fiscal Year To Date Total: \$34,340,874

Award Title	Amount	Investigators	PI Dept.	Sponsors
2019 Charlotte City Walks: Discover Charlotte's Neighborhood Stories	\$10,000	Principal Investigator (PI): Gaines, Angelique	Urban Institute	Sponsor: Foundation For The Carolinas (FFTC)
An Interactive Technology Enhanced Coaching Intervention for Black Women with Hypertension	\$149,397	Principal Investigator (PI): Abel, Willie	School of Nursing	Sponsor: National Institutes of Health (NIH)
Autonomous Robot Swarms for Urban Coverage	\$159,072	Principal Investigator (PI): Akella, Srinivas Co-PI: Shin, Min	Computer Science	Sponsor: DOD Defense Advanced Research Projects Agency (DARPA)
CEEP NC Fall Funding Opportunity: UNC Charlotte Voting Shuttle	\$1,500	Principal Investigator (PI): Johnson, Tamara	Metropolitan Studies and Extended Academic Programs	Sponsor: Ohio Campus Election Engagement Project (CEEP)
Charlotte Community Services Association SMART Evaluation - Phase 1	\$10,000	Principal Investigator (PI): Gavarkavich, Diane	Urban Institute	Sponsor: Charlotte Community Services Association
Charlotte water environmental services and student experiential learning	\$148,170	Principal Investigator (PI): Keen, Olya Co-PI: Bowen, James	Civil and Environmental Engineering	Sponsor: City of Charlotte
Chemical Weapons, Human Experimentation, and Articulations of Power in the British Empire	\$6,409	Principal Investigator (PI): Thorsheim, Peter	History	Sponsor: American Philosophical Society (APS)
Collaborative Research: Judicial Diversity and Appellate Decision Making	\$15,100	Principal Investigator (PI): Szmer, John	Political Science and Public Administration	Sponsor: National Science Foundation (NSF)
Collaborative: I/UCRC: Center for free form optics	\$50,000	Principal Investigator (PI): Davies, Matthew	Mechanical Engineering and Engineering Science	Sponsor: National Science Foundation (NSF)

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Comparing Freeform Optics Metrology Solution	\$47,307	Principal Investigator (PI): Evans, Christopher Co-PI: Falaggis, Konstantinos	Mechanical Engineering and Engineering Science	Sponsor: University of Rochester
CyPhy: Cyber-Secure Physical Layer Security in Millimeter Wave Communications	\$55,000	Principal Investigator (PI): Wang, Pu	Computer Science	Sponsor: Idaho National Laboratory (INL) Prime Sponsor: Department of Energy (DOE)
Design of Bio-Inorganic Hydrogels with Nanostructured Components	\$21,732	Principal Investigator (PI): Afonin, Kirill	Chemistry	Sponsor: University of North Carolina System Office(UNC SysOff)
Developing a biomarker panel to assess choline nutritional status	\$8,873	Principal Investigator (PI): Sha, Wei	Bioinformatics and Genomics	Sponsor: University of North Carolina at Chapel Hill (UNC-CH) Prime Sponsor: National Institutes of Health (NIH)
Evaluation of ourBRIDGE for KIDS Led by UNCC-COED	\$26,800	Principal Investigator (PI): Kolano, Lan Co-PI: Wang, Chuang	Middle, Secondary and K-12 Education	Sponsor: ourBRIDGE for KIDS Prime Sponsor: Foundation For The Carolinas (FFTC)
Excitons and exciton-polaritons in novel organic-inorganic hybrids with sub-nano inorganic layers	\$100,000	Principal Investigator (PI): Zhang, Yong Co-PI: Schmedake, Thomas	Electrical and Computer Engineering	Sponsor: DOD DA Army Research Office (ARO)
Fundamentals of Power Engineering to Support Integration of Distributed Energy Resources, CAPEREnhancement Project	\$30,000	Principal Investigator (PI): Chowdhury, Badrul Co-PI: Cecchi, Valentina	Electrical and Computer Engineering	Sponsor: Clemson University Prime Sponsor: Duke Energy Corporation
Healthy Wells	\$42,211	Principal Investigator (PI): Delmelle, Eric	Geography and Earth Sciences	Sponsor: Gaston County Health Department Prime Sponsor: Centers for Disease Control and Prevention (CDC)

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Integrating social and health data to advance equity and public health	\$25,000	Principal Investigator (PI): Dulin, Michael Co-PI: Coffman, Maren	Deans Office College of Health and Human Services	Sponsor: Illinois Public Health Institute (IPHI) Prime Sponsor: Robert Wood Johnson Foundation (RWJF)
Intergovernmental Personnel Act (IPA) Assignment	\$196,626	Principal Investigator (PI): Mullany, Brigid	Mechanical Engineering and Engineering Science	Sponsor: National Science Foundation (NSF)
Interpersonal Skills: Clarifying a Proliferated Construct Space and Proposing a Theoretical Framework	\$277,654	Principal Investigator (PI): Heggestad, Eric Co-PI: Banks, George	Psychological Science	Sponsor: DOD DA Army Research Institute
Mediating Catholicism: A Symposium on Global Catholic Media Practices	\$4,986	Principal Investigator (PI): Hoenes, Eric	Religious Studies	Sponsor: American Academy of Religion (AAR)
NCEMC Ex Ante Load Forecast Combination	\$100,678	Principal Investigator (PI): Hong, Tao	Systems Engineering and Engineering Management	Sponsor: North Carolina Association of Electric Cooperatives (NCAEC)
NSF iCorp: Polymer Semiconductor Educational Kits (PSEK)	\$50,000	Principal Investigator (PI): Walter, Michael	Chemistry	Sponsor: National Science Foundation (NSF)
Pharmacoengineering approaches to enhance the immune response to neoantigens	\$38,154	Principal Investigator (PI): Vivero-Escoto, Juan	Chemistry	Sponsor: University of North Carolina System Office(UNC SysOff)
SBE: Small: Behavioral Control of Deceivers in Online Attacks	\$112,337	Principal Investigator (PI): Zhou, Lina Co-PI: Zhang, Dongsong	Business Info Systems/Oper	Sponsor: National Science Foundation (NSF)
SBIR: LightSecure Freeform See- Through Display	\$42,577	Principal Investigator (PI): Owen, Joseph Co-PI: Davies, Matthew; Suleski, Thomas	Mechanical Engineering and Engineering Science	Sponsor: Nanohmics, Inc. Prime Sponsor: Department of Defense (DOD)
Standard: Establishing Norms of Data Ethics in Citizen Science	\$9,184	Principal Investigator (PI): Rasmussen, Lisa	Philosophy	Sponsor: North Carolina State University (NCSU) Prime Sponsor: National Science Foundation (NSF)

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STTR: Semi-Analytic Fresnel Propagation Simulation	\$45,000	Principal Investigator (PI): Gbur, Gregory	Physics and Optical Science	Sponsor: MZA Associates Corporation Prime Sponsor: DOD DAF Air Force Office of Scientific Research (AFOSR)
The TIES Center: Increasing Time, Instructional Effectiveness, Engagement, and State Support for Inclusive Practices for Students with Significant Cognitive Disabilities	\$347,445	Principal Investigator (PI): Wakeman, Shawnee Co-PIs: Collins, Belva; Flowers, Claudia	Special Education and Child Development	Sponsor: University of Minnesota Prime Sponsor: US Department of Education (DOED)
Tier 1 (Improving Mobility) Advanced Multimodal Mobility Solutions and Education	\$1,400,100	Principal Investigator (PI): Fan, Wei Co-PIs: Weggel, David; Kane, Martin; Pando, Miguel; Wang, Yu	Civil and Environmental Engineering	Sponsor: US Department of Transportation (DOT)
To prove the interplaying roles of central and peripheral immunity in Alzheimer's disease	\$425,622	Principal Investigator (PI): Cho, Hansang Co-PI: Marriott, Ian	Mechanical Engineering and Engineering Science	Sponsor: NIH National Institute on Aging (NIA)
Training Engineers on the Selection and Application of Appropriate Tools for Advanced CFD Analyses	\$42,960	Principal Investigator (PI): Uddin, Mesbah	Mechanical Engineering and Engineering Science	Sponsor: Mitchell Community College
Workshop/Collaborative Research: NSF Proposal Writing Workshop at 47th SME NAMRC and ASME MSEC 2019; Erie, Pennsylvania; June, 2019	\$6,596	Principal Investigator (PI): Schmitz, Tony	Mechanical Engineering and Engineering Science	Sponsor: National Science Foundation (NSF)