April 26, 2017

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

Total amount awarded for the month of March was \$2,026,987

Fiscal Year To Date Total: \$35,189,779

| Award Title | Amount | Investigators | PI Dept. | Sponsors |
|---|----------|---|---|--|
| 6th European Set Theory Confrence | \$24,000 | Principal Investigator (PI): Dow, Alan | Mathematics and Statistics | Sponsor: National Science Foundation (NSF) |
| A Multitude of Voices: The Danger of a Single Story The Memorial Library/Olga Lengyel Institute Summer Satellite Holocaust Teacher Education | \$6,000 | Principal Investigator (PI): Wertz-Orbaugh, Tonya | University Writing Programs | Sponsor: Olga Lengyel Institute Memorial Library |
| Acquisition of Multi-functional Nanoprobe Station-based Measurement System for Comprehensive in situ Materials Characterization and Measurement in SEM | \$6,000 | Principal Investigator (PI): Zhang, HaiTao | Mechanical Engineering and Engineering Science | Sponsor: Department of Defense (DOD) |
| Area Acoustic and Electromagnetic Emissions Monitoring - Phase 2 | \$40,615 | Principal Investigator (PI): Browne, Aidan Co-PI: Cox, Robert | Engineering Technology and Construction Management | Sponsor: Electric Power Research Institute (EPRI) |
| Blue Skies Manufacturing Workshop | \$48,029 | Principal Investigator (PI): Smith, Kevin | Mechanical Engineering and Engineering Science | Sponsor: National Science Foundation (NSF) |
| Collaborative Research: Judicial Diversity and Appellate Decision Making | \$76,659 | Principal Investigator (PI): Szmer, John | Political Science and Public Administration | Sponsor: National Science Foundation (NSF) |
| Collimated beam and water quality testing to be used in UV system evaluation at Mallard Creek wastewater treatment plant | \$44,686 | Principal Investigator (PI): Keen, Olya | Civil and Environmental Engineering | Sponsor: City of Charlotte |
| Democratizing the Model-based Domain from Design to Verification: Automatic Generation of Optimized CMM Programs on the DMC | \$27,883 | Principal Investigator (PI): Morse, Edward | Mechanical Engineering and Engineering Science | Sponsor: Metrosage, LLC Prime Sponsor: Digital Manufacturing and Design Innovation Institute (DMDII) |

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|--|-----------|---|---|---|
| Evaluation & Technical Assistance Partnership for The Duke Endowment Oral Health Grant Portfolio | \$15,000 | Principal Investigator (PI): Piper, Crystal | Public Health Sciences | Sponsor: Medical University of South Carolina (MUSC) Prime Sponsor: Duke Endowment |
| Exploring Student Perspectives and Crafting Best Practices for the University Professional Internship Program at UNC Charlotte | \$900 | Principal Investigator (PI): Norander, Stephanie | Communication Studies | Sponsor: North Carolina Career Development Association (NCCDA) |
| Extended IR Mueller Matrix Measurement Capability. | \$155,006 | Principal Investigator (PI): Aggarwal, Ishwar Co-PIs: Boreman, Glenn; Poutous, Menelaos | Physics and Optical Science | Sponsor: Department of Defense (DOD) Department of the Navy (DN) Office of Naval Research (ONR) |
| Globally convergent inverse algorithms via Carleman Weight Functions: theory, numerical studies and experimental verifications | \$206,070 | Principal Investigator (PI): Klibanov, Michael Co-PIs: Liu, Hui; Nguyen, Loc; Aleksandr Kolesov | Mathematics and Statistics | Sponsor: Department of Defense (DOD) Department of the Army (DA) Army Research Laboratory (ARL) |
| Industrial membership fees for the NSF IUCRC Award - SIBS Industry Funds | \$25,000 | Principal Investigator (PI): Cox, Robert | Electrical and Computer Engineering | Sponsor: All Other Business and Industry |
| Internal Curing of Concrete Using Lightweight Aggregate | \$20,011 | Principal Investigator (PI): Cavalline, Tara Co-PI: Tempest, Brett | Engineering Technology and Construction Management | Sponsor: North Carolina Department of Transportation (NCDOT) Prime Sponsor: Federal Highway Administration (FHWA) |
| Materials Characterization Laboratory Services - Master Agreement with Technicon Acoustics | \$100 | Principal Investigator (PI): Weaver, Katherine | Energy Production and Infrastructure Center | Sponsor: Technicon Acoustics, Inc. |
| Maximizing the Impact of ePHIM in Low-Income, Multiethnic Populations | \$14,390 | Principal Investigator (PI): Latulipe, Celine | Software and Information Systems | Sponsor: Wake Forest University Health Sciences Prime Sponsor: Agency for Healthcare Research and Quality (AHRQ) |
| NCEMC Delivery Point Level Load and Weather Data Analysis | \$79,056 | Principal Investigator (PI): Hong, Tao | Systems Engineering and Engineering Management | Sponsor: North Carolina Electric Membership Corporation (NCEMC) |

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| Regimes in Motion: Migration Administration in the Making of the Late Ottoman Empire | \$5,000 | Principal Investigator (PI): Fratantuono, Ella | History | Sponsor: American Philosophical Society (APS) |
| Regulation of Hsp70-Mediated Cyclin D1 Destruction in Breast Cancer | \$440,338 | Principal Investigator (PI): Truman, Andrew | Biological Sciences | Sponsor: National Institutes of Health (NIH) |
| Research Area 9.2: Microstructural and Mechanical Characterization of Lightweight Metals and Alloys with Coarse and Ultrafine-Grained Microstructures | \$45,000 | Principal Investigator (PI): Wei, Qiuming | Mechanical Engineering and Engineering Science | Sponsor: Department of Defense (DOD) Department of the Army (DA) Army Research Office (ARO) |
| Research on Tire Camber Control for Over-the-Road Trucks | \$10,000 | Principal Investigator (PI): Tkacik, Peter | Mechanical Engineering and Engineering Science | Sponsor: Michelin Americas Research Corporation (MARC) |
| REU Site: UNCC Crime Analytics - Research Experiences for Undergraduates | \$306,744 | Principal Investigator (PI): Turner, Michael Co-PIs: Bjerregaard, Beth; Phillips, Matthew | Criminal Justice and Criminology | Sponsor: National Science Foundation (NSF) |
| Risk Factors for Microscopic Colitis | \$39,952 | Principal Investigator (PI): Fodor, Anthony Co-PI: Winglee, Kathryn | Bioinformatics and Genomics | Sponsor: University of North Carolina at Chapel Hill (UNC-CH) Prime Sponsor: National Institutes of Health (NIH) |
| STEM Research and Engineering Apprenticeship | \$7,500 | Principal Investigator (PI): Pugalee, David Co-PIs: Wickliff, Alisa; Walter, Michael | Center for STEM Education | Sponsor: Academy of Applied Science Prime Sponsor: Army Educational Outreach Program (AEOP) |
| Story-Call: E-mobile Support for Community Caregivers of Veterans with Dementia | \$17,600 | Principal Investigator (PI): Davis, Boyd | English | Sponsor: Ralph H. Johnson Veterans Affairs Medical Center |
| Support for Development of an AIERCI Tool to Ensure Uninterrupted Energy Flow from Cyber Attacks Targeting Essential Forecasting Data for Grid Operations | \$59,971 | Principal Investigator (PI): Hong, Tao | Systems Engineering and Engineering Management | Sponsor: Department of Energy (DOE) Brookhaven National Laboratory Prime Sponsor: Department of Energy (DOE) |

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|--|-----------|--|---|--|
| Tailoring Mg-alloy System through Composition/Microstructure/Se vere Plastic Deformation for Army Extreme Dynamic Environment Applications | \$53,500 | Principal Investigator (PI): Wei, Qiuming | Mechanical Engineering and Engineering Science | Sponsor: Johns Hopkins University Prime Sponsor: Department of Defense (DOD) Department of the Army (DA) Army Corps of Engineers |
| The Myogenic Switch of Notch and mTOR | \$955 | Principal Investigator (PI): Arthur, Susan | Kinesiology | Sponsor: Sigma Xi, The Scientific Research Society |
| Turner AFB Groundwater Model | \$10,125 | Principal Investigator (PI): Langley, William Co-PI: Daniels, John | Civil and Environmental Engineering | Sponsor: Zapata, Inc. Prime Sponsor: Department of Defense (DOD) Department of the Army (DA) Army Research Office (ARO) |
| Visual Analytics on the spread of Pathogens | \$191,945 | Principal Investigator (PI): Janies, Daniel | Bioinformatics and Genomics | Sponsor: Ohio State University College of Medicine Prime Sponsor: Department of Defense (DOD) Defense Threat Reduction Agency (DTRA) |
| Vocal Accommodation Within Nonverbal Frequencies as a Marker of Status, Dominance, and Prestige | \$25,000 | Principal Investigator (PI): Dippong, Joseph | Sociology | Sponsor: Department of Defense(DOD) Department of the Army (DA) Army Research Office (ARO) |
| Workshop: 2017 NSF Proposal Writing Workshop | \$23,952 | Principal Investigator (PI): Schmitz, Tony | Mechanical Engineering and Engineering Science | Sponsor: National Science Foundation (NSF) |