

August 31, 2020

The Office of Research and Economic Development is pleased to announce awards received by UNC Charlotte Researchers in the month of July, 2020.

Total amount awarded for the month of July was \$4,641,675

Fiscal Year To Date Total: \$4,641,675

Award Title	Amount	Investigators	PI Dept.	Sponsors
Academy for Population Health Operational Funding (APHI Operational Funding FY20-21)	\$276,980	Principal Investigator (PI): Dulin, Michael Co-PIs: Robinson, Patrick; Scott, Victoria	Deans Office College of Health and Human Services	Sponsor: Mecklenburg County Health Department
An Interpretable Multimodal Data Mining and Machine Learning Pipeline for COVID-19 Clinical Stage Diagnosis Decision Support	\$19,203	Principal Investigator (PI): Chen, Shi	Public Health Sciences	Sponsor: North Carolina Biotechnology Center (NCBC)
Assessing Ethical Challenges in Conducting Do-it-Yourself (DIY) Science During the COVID-19 Pandemic	\$13,306	Principal Investigator (PI): Rasmussen, Lisa	Philosophy	Sponsor: University of Pennsylvania Prime Sponsor: National Science Foundation (NSF)
Building Evaluation Capacity Among Nonprofits To Increase Economic and Social Mobility	\$35,237	Principal Investigator (PI): Cook, James Co-PI: Kilmer, Ryan	Psychological Science	Sponsor: United Way of Central Carolinas
Building Teacher Capacity to Support Student STEM Research	\$15,832	Principal Investigator (PI): Wickliff, Alisa Co-PI: Pugalee, David	Center for STEM Education	Sponsor: National Science Teachers Association (NSTA) Prime Sponsor: Department of Defense (DOD) Department of the Army (DA)
Camino Fit Fostering Interprofessional Practice in a Latino Community Center to Improve Health and Wellness	\$46,455	Principal Investigator (PI): Bellar, David	Kinesiology	Sponsor: Camino Community Development Corporation, Inc.
CAREER: A Multiscale Framework for Crystalline Defects in 2-Dimensional Materials	\$65,394	Principal Investigator (PI): Li, Xingjie	Mathematics and Statistics	Sponsor: National Science Foundation (NSF)

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Characteristics and Evolution of Observed and Simulated Supercell Thunderstorms in the Central and Southern Appalachians	\$147,133	Principal Investigator (PI): Davenport, Casey Co-PI: Eastin, Matthew	Geography and Earth Sciences	Sponsor: Department of Commerce (DOC) National Oceanic and Atmospheric Administration (NOAA)
Characterization of Various Multifunctional Nucleic acid Nanoparticles and Understanding Their Immunotoxicity	\$56,218	Principal Investigator (PI): Afonin, Kirill	Chemistry	Sponsor: National Institutes of Health (NIH)
Charlotte Regional Integrated Behavioral Health Scholars (CRIBHS)	\$451,482	Principal Investigator (PI): Kulkarni, Shanti	School of Social Work	Sponsor: Department of Health and Human Services (DHHS) Health Resources and Services Administration (HRSA)
Chemoenzymatic Preparation of Tagged Bactoprenyl Diphosphate Linked Sugar Probes for in Vitro and Cellular Elucidation of Complex Bacterial Olysaaccharides	\$34,266	Principal Investigator (PI): Troutman, Jerry	Chemistry	Sponsor: National Institutes of Health (NIH)
CNS Core: Small: Moving Machine Learning into the Next-Generation Cloud Flexibly, Agilely and Efficiently	\$471,808	Principal Investigator (PI): Cheng, Dazhao	Computer Science	Sponsor: National Science Foundation (NSF)
CNS Core: Small: UbiVision: Ubiquitous Machine Vision with Adaptive Wireless Networking and Edge Computing	\$16,000	Principal Investigator (PI): Han, Tao Co-PI: Chen, Chen	Electrical and Computer Engineering	Sponsor: National Science Foundation (NSF)
Collaborative Research: Landscape Evolution in the McMurdo Dry Valleys: Erosion Rates and Real-Time Monitoring of Rock Breakdown in a Hyperarid, Subzero Environment	\$14,636	Principal Investigator (PI): Eppes, Martha	Geography and Earth Sciences	Sponsor: National Science Foundation (NSF)
Collaborative Research: Telomerase Regulation in Deep Branching Eukaryotes	\$43,250	Principal Investigator (PI): Chakrabarti, Kausik	Biological Sciences	Sponsor: National Science Foundation (NSF)

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Development of a Travelling Wave Ferro-Microfluidic Device for Particle Manipulation and Sorting in Gravitational and Non-Gravitational Environments	\$20,000	Principal Investigator (PI): Hewlin, Rodward Co-PI: Williams, Wesley	Engineering Technology and Construction Management	Sponsor: North Carolina Space Grant Consortium (NC Space Grant) Prime Sponsor: National Aeronautics and Space Administration
Enhancing Doctoral Training While Addressing Disparities in Health and Care Access: Incorporating Substance/Opioid Use Disorder (SUD/ODU) Treatment into Clinical Health Psychology and Integrated Behavioral Healthcare (IBH)	\$325,228	Principal Investigator (PI): Peterman, Amy	Psychological Science	Sponsor: Department of Health and Human Services (DHHS) Health Resources and Services Administration (HRSA)
Evaluating the Effectiveness of Green Dot to Prevent Multiple Forms of Violence Among High School Youth Who Have Been Exposed to Family Violence	\$124,273	Principal Investigator (PI): Mennicke, Annelise	School of Social Work	Sponsor: Centers for Disease Control and Prevention (CDC)
Fostering a Culture of Openness and Transparency with Institutional Authorship Policies	\$581,653	Principal Investigator (PI): Rasmussen, Lisa Co-PI: Banks, George; Hall-Hertel, Katherine; Reynolds, Thomas	Philosophy	Sponsor: National Science Foundation (NSF)
Gaston County Public Service Fellowship	\$26,879	Principal Investigator (PI): Barth, Thomas	Political Science and Public Administration	Sponsor: Gaston County
GTS Flywheel Energy Storage - Business Case Analysis	\$51,274	Principal Investigator (PI): Cox, Robert	Energy Production and Infrastructure Center	Sponsor: Global Technical Systems
High Photon Density Spatiotemporal (OAM+SAM) Vector Beams for Maritime Environments	\$50,000	Principal Investigator (PI): Gbur, Gregory	Physics and Optical Science	Sponsor: Clemson University Prime Sponsor: DOD DN Office of Naval Research (ONR)

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Improving Access and Healthier Food Choices through Daycare Take Home Dinners	\$60,638	Principal Investigator (PI): Racine, Elizabeth	Public Health Sciences	Sponsor: Cabarrus Health Alliance Prime Sponsor: Walmart Stores, Inc.
Leveraging Complex Systems Modeling Techniques to Increase Data Reliability and Secondary Data Analysis Trustworthiness in Our Academic Learning Healthcare System	\$109,541	Principal Investigator (PI): Diaz Vasquez, Jose	Public Health Sciences	Sponsor: Wake Forest University Prime Sponsor: National Institutes of Health (NIH)
Local Economic Impacts on North Carolina Counties by the Covid-19 Pandemic	\$108,868	Principal Investigator (PI): Connaughton, John Co-PI: Depken II, Craig	Economics	Sponsor: North Carolina Policy Collaboratory
Mental Health Services Enhancement and Needs Assessment for North Carolina Residents Impacted by COVID-19	\$7,000	Principal Investigator (PI): Cramer, Robert	Public Health Sciences	Sponsor: Psychology For All Prime Sponsor: Cardinal Innovations Healthcare Solutions
Metabolic and Immune Consequences of Antibiotic-Related Microbiome Alterations during TB Treatment	\$41,206	Principal Investigator (PI): Fodor, Anthony	Bioinformatics and Genomics	Sponsor: Northwestern University Prime Sponsor: National Institutes of Health (NIH)
New Genes and Adaptation	\$373,427	Principal Investigator (PI): Rogers, Rebekah	Bioinformatics and Genomics	Sponsor: National Institutes of Health (NIH)
Novel Engineered Optical Components	\$50,000	Principal Investigator (PI): Aggarwal, Ishwar	Physics and Optical Science	Sponsor: DOD Department of Navy (DN) Naval Research Laboratory (NRL)
Phase II I/UCRC UNC Charlotte: Center for Freeform Optics	\$105,560	Principal Investigator (PI): Suleski, Thomas Co-PI: Falaggis, Konstantinos	Physics and Optical Science	Sponsor: National Science Foundation (NSF)
Rapid Sars-Cov-2 Detection Based on Nanotechnology-Enhanced Lateral Flow Immunoassay	\$19,999	Principal Investigator (PI): Wang, Jun	Bioinformatics and Genomics	Sponsor: North Carolina Biotechnology Center (NCBC)

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Regenerative High Performance Curtainwall for Net Zero Energy Building Application	\$50,000	Principal Investigator (PI): Kim, Kyoung-Hee	School of Architecture	Sponsor: National Science Foundation (NSF)
Shared Administrative Support Funding for NSF IUCRC Phase II Center for Metamaterials	\$13,367	Principal Investigator (PI): Aggarwal, Ishwar	Physics and Optical Science	Sponsor: Clarkson University Prime Sponsor: National Science Foundation (NSF)
Teaming Up for Community Health: Mixed Methods Study of an Innovative Interprofessional Simulation Intervention	\$25,000	Principal Investigator (PI): Powers, Kelly	School of Nursing	Sponsor: National League for Nursing (NLN)
Technology-Rich Units for Future Secondary Teachers: Forging Mathematical Connections Through the Geometry of Functions	\$3,985	Principal Investigator (PI): McCulloch, Allison	Mathematics and Statistics	Sponsor: North Carolina State University (NCSSU) Prime Sponsor: National Science Foundation (NSF)
UNCC S-STEM: Engineering Academic Pathways	\$78,393	Principal Investigator (PI): Tempest, Brett	Civil and Environmental Engineering	Sponsor: National Science Foundation (NSF)
Undergraduate Internship in Soil Characterization	\$7,892	Principal Investigator (PI): Clinton, Sandra Co-PI: Eppes, Martha	Geography and Earth Sciences	Sponsor: Electric Power Research Institute (EPRI)
Understanding SNX-BAR Protein Structure and Function in Yeast	\$675,992	Principal Investigator (PI): Chi, Richard	Biological Sciences	Sponsor: National Science Foundation (NSF)
Universal Power Gateway for Tactical Microgrids	\$24,300	Principal Investigator (PI): Gafford, James	Energy Production and Infrastructure Center	Sponsor: Hyperion Technology Group, Inc Prime Sponsor: Department of Defense (DOD)