

ROWAN UNIVERSITY SPONSORED PROGRAMS QUARTERLY ACTIVITY REPORT

Current Activity: FY19

Q2 research expenditures: \$ 18,889,504.71

YTD expenditures: \$ 28,058,072.77

Proposals Submitted and Awards Received October 1, 2018 - December 31, 2018

	#	Q2 FY19	YTD #	YTD FY19
Proposals Submitted	139	\$ 47,448,626	217	\$ 64,015,920
NJ Awards	9	\$ 1,065,051	17	\$ 2,004,091
Federal Awards	14	\$ 2,040,889	41	\$ 8,712,483
Private/Industry	16	\$ 1,313,367	36	\$ 3,211,139
Clinical/Service	-	\$ -	-	\$ 680
Total Awards	39	\$ 4,419,307	94	\$ 13,928,393

Comparative Data: Prior FY

	#	Q2 FY18	YTD #	YTD FY18
Proposals Submitted	118	\$ 35,211,295	185	\$ 52,269,472
NJ Awards	6	\$ 1,289,434	16	\$ 2,433,964
Federal Awards	7	\$ 1,337,198	33	\$ 8,223,426
Private/Industry	9	\$ 407,720	22	\$ 1,165,034
Clinical/Service	-	\$ 19,508	-	\$ 35,992
Total Awards	22	\$ 3,053,860	71	\$ 11,858,416

Q2 research expenditures: \$ 4,797,271.45

Y-T-D research expenditures: \$ 10,992,915.13

Project Title	Award Amount	Indirect Cost Total	Lead PI	Other Personnel	Sponsor	Proposal Prime Sponsor	Award Admin Dept	Award Begin Date	Award End Date
Admin (1)	\$40,000								
Regional Training in Primary Sources for Teachers	\$40,000	\$0	Michelle Kowalsky		Waynesburg University	Library of Congress	Library Services	Oct 1, 2018	Mar 31, 2020
CHSS (2)	\$373,077								
The Megan Giordano Fellow in Public History	\$125,000	\$13,021	William Carrigan		Gloucester County Parks & Recreation		History	Sep 1, 2018	Aug 30, 2019
Does the Detention and Deportation of Illegal Immigrants Reduce Crime? A Nationwide Examination of the Impact of 287(g) agreements on Violent and Property Crime	\$248,077	\$82,692	Joel Capellan	Evan Sorg	National Institute of Justice (NIJ)		Law/Justice	Jan 1, 2019	Dec 31, 2021
CMSRU (2)	\$113,238								
Emerin regulation of nuclear architecture during cell invasion and metastasis	\$105,238	\$9,235	James Holaska		W.W. Smith Charitable Trust		CMSRU Biomedical Science	Dec 1, 2018	Nov 30, 2019
ANK-dependent ATP efflux causes calcium pyrophosphate deposition in cartilage	\$8,000	\$0	Charlene Williams		Medical College of Wisconsin		CMSRU Biomedical Science	Nov 1, 2017	Oct 31, 2018
CPA (1)	\$15,000								
Movement: A Celebration of Women in Choreography	\$15,000	\$0	Deborah Shapiro		NJ State Council on the Arts (NJSCA)		Performing Arts Dean	Jul 1, 2018	Jun 30, 2019
CSM (5)	\$163,345								
Portable Liquid Chromatograph for Point-of-Care Monitoring of Illicit Substances	\$76,642	\$18,214	James Grinias		Axcend Corporation	National Institutes of Health	Chemistry & Biochemistry	Sep 15, 2018	Aug 31, 2019
Restek Corporation Sponsored Research Agreement	\$30,000	\$10,000	James Grinias		Restek	Restek	Chemistry & Biochemistry	Jan 1, 2019	Dec 31, 2019
Visualization and mining of metabolomics data	\$35,000	\$11,666	Vasil Hnatyshin		Bristol-Myers Squibb (BMS)		Computer Science	Jun 1, 2017	Jun 15, 2019
Examining the Impact of a Fresh Food Pharmacy Group Intervention for Individuals with Type 2 Diabetes in a Clinical Setting	\$5,000	\$0	Nicole Vaughn		Cumberland/Salem/Gloucester Health Wellness Alliance, Inc.	Horizon Foundation of NJ	Health & Exercise Science	Sep 1, 2018	Aug 31, 2019
Optimizing a self-directed mobile mindfulness intervention for improving cardiorespiratory failure survivors' psychological distress	\$16,703	\$5,568	Jeffrey Greeson		Duke University	National Institutes of Health	Psychology	Sep 1, 2018	Aug 31, 2019
EDU (3)	\$548,980								
Measurement of Young Peoples Policy Arguments in Authentic Contexts	\$2,500	\$326	Shelley Zion		University of Colorado - Boulder		Center for Access, Success, and Equity	Jul 1, 2016	Jun 30, 2019
Camden Promise Neighborhood	\$146,606	\$13,206	Shelley Zion		Center For Family Services (CFS)	US Department of Education	Center for Access, Success, and Equity	Sep 1, 2017	Jun 30, 2019
Critical Civic Inquiry: Student Centered Learning	\$399,874	\$52,157	Shelley Zion		Jobs for the Future		Center for Access, Success, and Equity	Aug 1, 2018	Sep 30, 2020
ENG (13)	\$943,153								
Liquid fibers for continuously operated liquid-liquid extraction	\$55,000	\$0	Martin Haase		American Chemical Society- Petroleum Research Fund (ACS PRF)		Chemical Engineering	Sep 1, 2019	Aug 31, 2020
Roadmap for Solvent Recovery in Industrial Manufacturing: Enhancing Process Efficiency through Resource Minimization	\$147,529	\$44,747	Kirti Yenkie	C. Stewart Slater, Mariano Savelski	US Department of Environmental Protection Agency (USEPA)		Chemical Engineering	Oct 1, 2018	Sep 30, 2020
Evaluation of laboratory performance of binder and Hot mix Asphalt	\$4,020	\$1,340	Yusuf Mehta		American Asphalt Company		Civil/Env Engineering	Jan 1, 2018	Dec 31, 2018
The Shaker Shield - An Innovative Technology for Inhabitant Protection in High Seismic Risk Areas	\$50,000	\$5,000	Cheng Zhu	Chuck McGlynn, Hong Zhang	National Science Foundation (NSF)		Civil/Env Engineering	Dec 1, 2018	May 31, 2019
Creation of a library of novel examples for an enriching geotechnical engineering learning experience	\$5,000	\$370	Cheng Zhu		US Universities Council on Geotechnical Education and Research		Civil/Env Engineering	Oct 1, 2018	Sep 30, 2019
Active Earth science learning for K-12 students	\$2,000	\$0	Cheng Zhu		Christian and Mary Lindback Foundation		Civil/Env Engineering	Oct 1, 2019	Sep 30, 2020
Microstructural effects on creep and fatigue in heterogeneous salt	\$11,604	\$726	Cheng Zhu		State Key Laboratory of Oil and Gas Reservoir Geology and Exploitation		Civil/Env Engineering	Dec 1, 2018	Dec 31, 2020
Regional UTC Program	\$190,000	\$62,000	Rouzbah Nazari	Yusuf Mehta	Rutgers, The State University of New Jersey	US Department of Transportation	Civil/Env Engineering	Sep 1, 2018	Sep 30, 2019
MemSat Development	\$25,000	\$0	Sangho Shin	John Schmalzel, Robert Krchnavek	Rutgers, The State University of New Jersey	National Aeronautics Space Administration	Electrical/Computer Engineering	Apr 1, 2016	Mar 31, 2018
E4SPA: Elearning Course for Sustainable Production Automation	\$10,000	\$0	Ying Tang		IEEE Robotics & Automation Society	IEEE Robotics & Automation Society	Electrical/Computer Engineering	Sep 1, 2018	Aug 31, 2019
Rowan's Graduate Fellowship Prepares for the Modern Age of Artificial Intelligence (Rowan's Prepare.AI)	\$398,000	\$0	Ghulam Rasool	Bo Sun, Cheryl Bodnar, Francis Haas, Nidhal Bouaynaya, Ravi Ramachandran, Robi Polikar, Shen-Shyang Ho, Vahid Heydari	US Department of Education	US Department of Education	Electrical/Computer Engineering	Oct 1, 2018	Sep 30, 2019
Promoting Education in Green Transportation through the Formula Electric Clinic	\$30,000	\$4,500	Anu Osta	Ratneshwar Jha	Constellation		Mechanical Engineering	Nov 15, 2018	Dec 31, 2020
Engineering Clinic Program: A platform for documenting the experiences and challenges of female undergraduate students and identify factors influencing their recruitment and retention.	\$15,000	\$0	Anu Osta		Engineering Information Foundation		Mechanical Engineering	Jan 1, 2019	Dec 31, 2019
SEE (1)	\$172,906								

National Guard Facilities GIS Internship Program	\$172,906	\$35,679 John Hasse		NJ Dept. of Military and Veteran Affairs	NJ Dept. of Military and Veteran Affairs (NJDMAVA)	Geography, Planning, and Sustainability	Oct 1, 2018	Sep 30, 2019
SOM (11)	\$2,049,608							
To Sleep or Not to Sleep - Are Calcium Sensor Proteins NCALD and S100B Part of the Answer?	\$25,000	\$0 Venkateswar Venkataraman	Richard Jermyn	Osteopathic Heritage Foundation		Cell Biology	Jul 30, 2018	Jul 29, 2019
Translational rescue mechanisms in eukaryotes	\$314,025	\$116,525 Natalia Shcherbik		National Institutes of Health		Cell Biology	Sep 1, 2018	Aug 31, 2019
Gene Therapy of Canavan Disease	\$578,131	\$156,137 Paola Leone	Jeremy Francis	Pfizer Inc.		Cell Biology	Apr 1, 2018	Dec 1, 2018
Award for NJ Health Foundation Excellence in Research	\$1,000	\$0 Paola Leone		NJ Department of Health		Cell Biology & Neuroscience	Jul 1, 2018	Jun 30, 2019
Children's Mental Health- Intellectual Disability Outpatient Care	\$221,400	\$0 Wendy Aita		New Jersey Department of Children and Families (NJDCF)		Developmental Disabilities	Jul 1, 2018	Jun 30, 2019
Model State-Supported Area Health Education Centers	\$74,407	\$5,512 Joshua Coren	Xitlalichomiha O'Dell	Health Resources and Services Administration (HRSA)		Family Medicine	Sep 1, 2018	Aug 31, 2019
Regulation of the Gli protein TRA-1 by co-factors	\$305,900	\$115,900 Ronald Ellis		National Institutes of Health		Molecular Biology	Jan 1, 2019	Dec 31, 2019
A Comprehensive Center for Huntington Disease	\$308,605	\$4,862 Michael McCormack		NJ Department of Health		Pathology	Jul 1, 2018	Jun 30, 2019
Psychological Services For Abused & Neglected Children - 19BYDS	\$197,890	\$0 Wendy Aita		New Jersey Department of Children and Families (NJDCF)		Psychiatry	Jul 1, 2018	Jun 30, 2019
FY19 EOF - Graduate Biomedical	\$22,250	\$0 Linda Boyd		The New Jersey Office of the Secretary of Higher Education (OSHE)		School of Osteopathic Medicine Dean	Jun 1, 2018	Jul 31, 2019
RowanSOM Pre-Matriculation Program	\$1,000	\$0 Linda Boyd		NJ Department of Education (NJDE)		SOM Academic Affairs	Jun 18, 2018	Jul 20, 2018
RU Total (39)	\$4,419,307							

Proposals
October 1, 2018 - December 31, 2018

Title	Requested Amount	Lead PI	Other Personnel	Award Admin Department	Sponsor
Admin (2)	\$480,051				
C.H.A.M.P. Program	\$440,051	Winona Wigfall		CHAMP/GEAR UP	The New Jersey Office of the Secretary of Higher Education (OSHE)
Regional Training in Primary Sources for Teachers	\$40,000	Michelle Kowalsky		Library Services	Waynesburg University
CCCA (1)	\$24,681				
The Climate Change Reporting Project	\$24,681	Dianne Garyantes	Mark Berkey-Gerard	Journalism	The Philadelphia Foundation
CHSS (2)	\$110,001				
The Megan Giordano Fellow in Public History	\$75,001	William Carrigan		History	Gloucester County Parks & Recreation
Natural History and Intervention Decisions of Thoracic Aortic Aneurysm Revisited	\$35,000	Yupeng Li		Political Science & Economics	New Jersey Health Foundation, Inc. (NJHF)
CMSRU (10)	\$1,077,247				
Emerin Regulation of Nuclear Structure in Invasive Breast Cancer Cells	\$50,000	Alexandra Liddane	James Holaska	CMSRU Biomedical Science	NJ Department of Health
Development of novel small molecule inhibitor of STAT3 for obese breast cancer patients	\$35,000	Manoj Pandey	Subash Jonnalagadda	CMSRU Biomedical Science	New Jersey Health Foundation, Inc. (NJHF)
Molecular mechanisms of Noggin-mediated rhabdomyosarcoma resistance to treatment	\$34,776	Zeus Antonello	Igor Kuzin	CMSRU Biomedical Science	New Jersey Health Foundation, Inc. (NJHF)
Topical Application of IgM Antibodies to Enhance Cutaneous Wound Healing	\$34,943	Zeus Antonello	Igor Kuzin	CMSRU Biomedical Science	New Jersey Health Foundation, Inc. (NJHF)
Development of Novel Bruton's Tyrosine Kinase Inhibitors for Treatment of Refractory and Relapsed Multiple Myeloma	\$360,438	Manoj Pandey		CMSRU Biomedical Science	National Institutes of Health (NIH)
Investigation of the role of HBSu acetylation in DNA binding and gene expression	\$34,970	Valerie Carabetta		CMSRU Biomedical Science	New Jersey Health Foundation, Inc. (NJHF)
Efficacy of adipose derived stem cells to reduce the risk of anastomotic leak in ischemic colon anastomosis in a rat model	\$34,950	Michael Kwiatt		CMSRU Biomedical Science	New Jersey Health Foundation, Inc. (NJHF)
Brain Mechanisms of Adherence to Extended Release Naltrexone in Opioid Use	\$392,404	Igor Elman		CMSRU Dean	University of Pennsylvania
A critical role of the rostromedial tegmental nucleus in aversion (pain) and reward (analgesia): its putative function in pain chronification	\$89,516	Igor Elman		CMSRU Dean	Massachusetts General Hospital
MCAT preparation course- Premedical Urban Leaders Summer Enrichment (PULSE) program	\$10,250	Jocelyn Mitchell-Williams		CMSRU Multicultural Affairs	Dolfinger-McMahon Foundation
CSM (37)	\$8,577,304				
Gut microbiome suppression of fungal honey bee brood pathogens	\$39,500	Svetlana Vojvodic		Biological Sciences	Project Apis m.
Characterizing the role of genomic motif elements in human disease	\$31,000	Stephanie Spielman		Biological Sciences	New Jersey Health Foundation, Inc. (NJHF)
Low-frequency electromagnetic field (EMF) exposure impacting honey bee physiology	\$35,000	Svetlana Vojvodic		Biological Sciences	New Jersey Health Foundation, Inc. (NJHF)
Development of a Chemical Technician Certification Program for Nontraditional Students in Two-Year Colleges	\$541,660	James Grinias	Gustavo Moura-Letts, Matthew Pilarz	Chemistry & Biochemistry	National Science Foundation (NSF)
Mycobacterium vaccae immunization for cocaine addiction and relapse	\$398,480	Thomas Keck	Bradford Fischer, Ileana Soto	Chemistry & Biochemistry	National Institutes of Health
RUI: Combining experiments and simulations to optimize biomolecular ionic liquids for protein stabilization	\$294,806	Timothy Vaden	Chun Wu, Gregory Caputo	Chemistry & Biochemistry	National Science Foundation (NSF)
Joint Computational-Experimental Drug Discovery of Biased agonists to dopamine D2 receptor toward better anti-psychotic/Parkinson's medications.	\$35,000	Chun Wu	Thomas Keck	Chemistry & Biochemistry	New Jersey Health Foundation, Inc. (NJHF)
Evaluate modified artemisinin and its derivatives for potential treatment of various forms of cancer	\$35,000	Amos Mugweru	Iman Noshadi, Subash Jonnalagadda	Chemistry & Biochemistry	New Jersey Health Foundation, Inc. (NJHF)
Using LC-MS/MS to Identify Dysregulated Neurotransmitters Involved with Neurological Disorders	\$34,750	James Grinias	David Devilbiss	Chemistry & Biochemistry	New Jersey Health Foundation, Inc. (NJHF)
Analgesia without Addiction: Synthesis and Development of Highly Selective Novel Analgesics	\$35,000	Thomas Keck	Gustavo Moura-Letts	Chemistry & Biochemistry	New Jersey Health Foundation, Inc.

Proposals
October 1, 2018 - December 31, 2018

Diazirine-Based Tissue Adhesives	\$1,764,065	Gustavo Moura-Letts		Chemistry & Biochemistry	National Institutes of Health (NIH)
COLLABORATIVE: Applying Ion-Exchange Chromatography and Supercritical Fluid Chromatography to 2D-LC Analysis of Metabolites	\$218,892	James Grinias		Chemistry & Biochemistry	National Science Foundation (NSF)
Restek Corporation Sponsored Research Agreement	\$20,000	James Grinias		Chemistry & Biochemistry	Restek
Novel Chemical Probes for Tissue Adhesives	\$35,000	Gustavo Moura-Letts		Chemistry & Biochemistry	New Jersey Health Foundation, Inc. (NJHF)
CHS: Towards Equitable Distribution and Pricing of Work in Crowdwork	\$54,821	Chenxi Qiu		Computer Science	National Science Foundation (NSF)
The Impact of Acute Resistance Exercise and Training Status on Intestinal Permeability in Young Healthy Individuals	\$34,494	Daniel Freidenreich	Dylan Klein	Health & Exercise Science	New Jersey Health Foundation, Inc. (NJHF)
Developing sensitive outcome measures to evaluate various motor symptoms in multiple sclerosis	\$47,180	Mehmet Uygur		Health & Exercise Science	National Multiple Sclerosis Society
A novel approach to evaluate motor symptoms in multiple sclerosis	\$33,110	Mehmet Uygur		Health & Exercise Science	New Jersey Health Foundation, Inc. (NJHF)
Bridging Undergraduate Student Research in Mathematics Between Four-Year and Two-Year Institutions	\$18,900	Hieu Nguyen		Mathematics	Center for Undergraduate Research in Mathematics
Globally convergent numerical algorithms for inverse scattering problems using multi-frequency data	\$207,534	Thanh Nguyen		Mathematics	National Science Foundation (NSF)
Reverse micelle encapsulation as a strategy for enhancing the stability and transfer of biomolecules into living cells	\$445,500	Nathaniel Nucci	Benjamin Carone,Ileana Soto	Molecular & Cellular Biosci	National Institutes of Health (NIH)
HSV glycoprotein D impact on intercellular junctions	\$443,999	Claude Krummenacher	Claude Krummenacher	Molecular & Cellular Biosci	National Institutes of Health (NIH)
Nectin-1 as a new target for checkpoint immunotherapy against breast cancer	\$35,000	Claude Krummenacher	Claude Krummenacher,Mary Alpaugh	Molecular & Cellular Biosci	New Jersey Health Foundation, Inc. (NJHF)
Improving Outcomes in Ovarian Cancer through a Combinatorial Approach of PD-1/PD-L1 Immunotherapy and Nanoparticle-Mediated Hyperthermia	\$75,000	Nicholas Whiting		Molecular & Cellular Biosci	Rivkin Center for Ovarian Cancer
Directed Epigenetic Reprogramming	\$1,865,844	Benjamin Carone		Molecular & Cellular Biosci	National Institutes of Health (NIH)
Optimizing Engineered Fusion Proteins to Reprogram Cells	\$34,500	Benjamin Carone		Molecular & Cellular Biosci	New Jersey Health Foundation, Inc. (NJHF)
A Novel Approach for Manufacture of Quantum Dots for Biomedical Diagnostics using Reverse Micelles	\$35,000	Nathaniel Nucci		Physics & Astronomy	New Jersey Health Foundation, Inc. (NJHF)
Recruitment, Retention, Mentorship, and Development of South Jersey High School Physics Teachers - Preparing All Students for STEM Careers	\$11,850	Karen Magee-Sauer		Physics & Astronomy	State Farm
High Performing Printed Electrodes for Neurostimulation Applications	\$35,000	Jeffrey Hettinger		Physics & Astronomy	New Jersey Health Foundation, Inc. (NJHF)
RUI: Constraining Mars GCM Microphysics through Comparisons with Global Datasets	\$301,647	Dave Klassen		Physics & Astronomy	National Science Foundation (NSF)
Dating Violence and Sexual Risk Prevention for Young Mothers	\$424,063	Meredith Joppa	Georita Frierson	Psychology	National Institutes of Health
How much and how often? An exploration of factors associated with young adult alcohol and e-cigarette use	\$28,560	Chelsie Young	Rui Shi	Psychology	New Jersey Health Foundation, Inc. (NJHF)
A Novel Exercise Intervention for Motor and Psychiatric Symptoms in Schizophrenia	\$35,000	Tom Dinzeo	Mehmet Uygur	Psychology	New Jersey Health Foundation, Inc. (NJHF)
Mindfulness to Promote Healthy Aging in Older Adults with Mild Cognitive Impairment	\$31,591	Jeffrey Greeson	Lisa Bodenheimer,Sean McBride	Psychology	New Jersey Health Foundation, Inc. (NJHF)
Supporting Prevention in Relationships for Teams (SPoRT): A data-driven prevention intervention to promote healthy relationships for student-athletes	\$24,998	Meredith Joppa	D.J. Angelone,Penny Kempf	Psychology	National Collegiate Athletic Association
RU Mindful: Searching for the Signature of Mindfulness and Health	\$424,583	Jeffrey Greeson		Psychology	National Institutes of Health (NIH)
The Development and Validation of a Novel Paradigm for Assessing Sexual Violence Risk Perception in MSM	\$410,977	D.J. Angelone		Psychology	National Institutes of Health (NIH)
EDU (6)	\$616,931				
Using Strings to Increase Engagement and Change Discourse in Secondary Math Classrooms	\$6,000	Rob Wieman	Jill Perry	Center for Access, Success, and Equity	National Council of Teachers of Mathematics
Transforming Student Voice	\$62,404	Shelley Zion		Center for Access, Success, and Equity	University of Colorado - Boulder
Camden Promise Neighborhood	\$137,128	Shelley Zion		Center for Access, Success, and Equity	Center For Family Services (CFS)

Proposals
October 1, 2018 - December 31, 2018

A Collaborative Approach to Assessment with Community College Faculty	\$2,000	Monica Kerrigan		Edu Svcs & Leadership	Council for the Study of Community Colleges
Safe Space and the Ethics of Higher Education	\$35,929	Cecile Sam		Edu Svcs & Leadership	The Center for Ethics & Education
Diversifying the Teacher Pipeline: A multi-tiered approach to school-university-community partnerships	\$373,470	Monika Williams Shealey	Cori Brown, Stacey Leftwich	Education Dean	NJ Department of Education (NJDE)
ENG (44)	\$23,239,577				
Mechanism of Bacteria adhesion to medical devices: Multiscale Multiphysics simulation study	\$495,605	Hamid Seyyedhosseinzadeh	Hamed Seyyedhosseinzadeh	Biomedical Engineering	National Science Foundation (NSF)
Metallic Orthopedic Hip Implant with Stiffness as low as cortical bone	\$759,278	Hamid Seyyedhosseinzadeh	Hamed Seyyedhosseinzadeh	Biomedical Engineering	National Science Foundation (NSF)
New Prosthetic Knee Simulator with 14-Degrees of Freedom for movement	\$331,167	Hamid Seyyedhosseinzadeh		Biomedical Engineering	National Science Foundation (NSF)
Investigation of BPDE-DNA adducts by using nanopore	\$35,000	Jiwook Shim		Biomedical Engineering	New Jersey Health Foundation, Inc. (NJHF)
Microfiber-Enforced Hydrogels with Cartilage-Like Properties	\$30,000	Sebastian Vega		Biomedical Engineering	New Jersey Health Foundation, Inc. (NJHF)
Advancing Structural Materials for Army Modernization Priorities Via Direct Write Approaches	\$12,778,466	Joseph Stanzione	Francis Haas, Ratneshwar Jha, William Riddell	Chemical Engineering	US Department of Defense
Engineering 3D printed bioelectronics as smart self-oxygenating tissue scaffold	\$2,477,631	Iman Noshadi	Andrea Bottaro	Chemical Engineering	National Institutes of Health (NIH)
A Novel Approach to Increase Adhesion, Antimicrobial and Hemostatic Properties of Biomaterials for Use as Traumatic Injury Sealants	\$858,000	Iman Noshadi	Andrea Bottaro, Gregory Caputo, Joshua Hazelton	Chemical Engineering	National Institutes of Health (NIH)
Novel Injectable Prodrug-Based Nanoreactor Hydrogels Toward Therapeutic Nanofactories	\$35,000	Iman Noshadi	Manoj Pandey, Subash Jonnalagadda	Chemical Engineering	New Jersey Health Foundation, Inc. (NJHF)
3D Printed Gradient Scaffolds for Repair of the Annulus Fibrosus of the Intervertebral Disc	\$328,042	Andrea Vernengo		Chemical Engineering	National Institutes of Health (NIH)
Decellularization of Intervertebral Disc Tissue using Pulsed Electric Field Exposures	\$35,000	Gary Thompson		Chemical Engineering	New Jersey Health Foundation, Inc. (NJHF)
Systems analysis to evaluate cardiotoxic effects in survivors of pediatric cancers	\$35,000	Kirti Yenkie		Chemical Engineering	New Jersey Health Foundation, Inc. (NJHF)
Palmer International: FFS Agreement	\$0	Joseph Stanzione		Chemical Engineering	Palmer International, Inc.
Developing Safety Performance Functions for Rural Two-Lane Highways that Incorporate Speed Measures	\$170,000	Mohammad Jalayer	Nasrine Bendjilali, Seyed-Farzan Kazemi	Civil/Env Engineering	TransDAC LLC
Detection of Poly- and Perfluoroalkyl Substances (PFASs) in New Jersey Rivers and Wastewater Treatment Plants	\$20,000	Sarah Bauer	Iman Noshadi	Civil/Env Engineering	NJ Water Resources Research Institute
Application of an Innovative Method in Determining the Impacts of Air Quality on Human Health in Urban Settings	\$25,001	Maryam Karimi		Civil/Env Engineering	US Department of Environmental Protection Agency (USEPA)
Wrong-Way Driving Solutions, Policy, and Guidance	\$39,984	Mohammad Jalayer		Civil/Env Engineering	Auburn University
Characterizing Near-Surface Temperature Variation and Air Quality for Climate Health Impacts in Camden, NJ	\$25,001	Maryam Karimi		Civil/Env Engineering	US Department of Environmental Protection Agency (USEPA)
Synthesis of National Best Practices on Pedestrian and Bicycle Design, Guidance and Technology Innovations	\$69,983	Mohammad Jalayer		Civil/Env Engineering	Texas A&M Transportation
Advanced Pothole Repair	\$344,000	Ayman Ali	Cheng Zhu	Civil/Env Engineering	NJ Department of Transportation (NJDOT)
Microstructure-Enriched 3D Printed Tablets for Tunable Drug Release	\$35,000	Cheng Zhu	Amir Miri Ramsheh, Ben Wu	Civil/Env Engineering	New Jersey Health Foundation, Inc. (NJHF)
National Consortium for Transportation Infrastructure, Durability and Resiliency	\$149,999	Yusuf Mehta	Ayman Ali, Cheng Zhu	Civil/Env Engineering	Louisiana State University
The Shaker Shield - An Innovative Technology for Inhabitant Protection in High Seismic Risk Areas	\$50,000	Cheng Zhu	Chuck McGlynn, Hong Zhang	Civil/Env Engineering	National Science Foundation (NSF)
Determine Impact of E-pave product on Life of Hot mix Asphalt	\$80,000	Yusuf Mehta	Ayman Ali	Civil/Env Engineering	ePAVE, LLC
CTL Core Testing	\$0	Caitlin Purdy		Civil/Env Engineering	Construction Technology Laboratories, Inc.
Long Term Pavement Performance (LTPP) Material Reference Library (MRL)	\$281,790	Ayman Ali		Civil/Env Engineering	Armand Corporation
Low-Cost and Reliable CubeSat Technologies	\$25,000	Sangho Shin	John Schmalzel, Robert Krchnavek	Electrical/Computer Engineering	Rutgers, The State University of New Jersey

Proposals
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Optimize Student Learning through Personalized Instruction and Need-aware Gaming (PING)	\$299,992	Ying Tang	Robi Polikar,Sarah Ferguson	Electrical/Computer Engineering	National Science Foundation (NSF)
Rowan's Graduate Fellowship Prepares for the Modern Age of Artificial Intelligence (Rowan's Prepare.AI)	\$1,194,000	Ghulam Rasool	Bo Sun,Cheryl Bodnar,Francis Haas,Nidhal Bouaynaya,Ravi Ramachandran,Robi Polikar,Shen-Shyang Ho,Vahid Heydari	Electrical/Computer Engineering	US Department of Education
Gross Tumor Segmentation using Optimal Mass Transport Loss Function	\$124,616	Ghulam Rasool	Nidhal Bouaynaya	Electrical/Computer Engineering	Varian Medical Systems
Real-time Imaging Guidance for Curative Cancer Surgery	\$34,900	Ben Wu	Spencer Brown,Xiao Hu,Ying Tang	Electrical/Computer Engineering	New Jersey Health Foundation, Inc. (NJHF)
Collaborative Research: Enhancing STEM Education with Machine Learning and Artificial Intelligence Applications: A University-Industry Cooperative Strategy	\$149,932	Ravi Ramachandran	Amy Accardo,Nidhal Bouaynaya	Electrical/Computer Engineering	National Science Foundation (NSF)
EnaBLE - An Enhanced Bionic Limb	\$35,000	Ghulam Rasool		Electrical/Computer Engineering	New Jersey Health Foundation, Inc. (NJHF)
E4SPA: Elearning Course for Sustainable Production Automation	\$10,000	Ying Tang		Electrical/Computer Engineering	IEEE Robotics & Automation Society
Searching Optimal Policies for Brain Tumor Treatment Using Reinforcement Learning	\$5,000	Ghulam Rasool		Electrical/Computer Engineering	Google Inc
RESEARCH EXPERIENCE FOR TEACHERS: ROWAN'S RESEARCH OPPORTUNITIES PARTNER INDUSTRIES WITH COMMUNITY COLLEGE EDUCATORS TO SEIZE THE DATA REVOLUTION	\$599,954	Nidhal Bouaynaya	Amy Accardo,Chun Wu,Francis Haas,Ghulam Rasool,Issam Abi-El-Mona,Kauser Jahan,Maryam Karimi,Ravi Ramachandran,Rouzbeh Nazari,Shreekanth Mandayam	Engineering Dean	National Science Foundation (NSF)
ShiRAS: Towards Safe and Reliable Autonomy in Sensor Driven Systems	\$299,592	Nidhal Bouaynaya	Ghulam Rasool	Engineering Dean	National Science Foundation (NSF)
MRIMATH: A Software for Coordinates and Volumetrics in MRI Brain Imaging	\$35,000	Nidhal Bouaynaya		Engineering Dean	New Jersey Health Foundation, Inc. (NJHF)
Promoting Education in Green Transportation through the Formula Electric Clinic	\$50,000	Anu Osta	Ratneshwar Jha	Mechanical Engineering	Constellation
Dual-Mode Tactile Sensor Arrays Inspired by Mechanoreceptors in Human Fingers	\$35,000	Wei Xue	Jeffrey Hettinger	Mechanical Engineering	New Jersey Health Foundation, Inc. (NJHF)
3D Printed Miniaturized Bio-Energy Storage Devices for Advanced Manufacturing of Bioelectronics	\$35,000	Nourouddin Sharifi	Iman Noshadi	Mechanical Engineering	New Jersey Health Foundation, Inc. (NJHF)
Vocal Fold In Situ Printing	\$35,000	Amir Miri Ramsheh	Anu Osta	Mechanical Engineering	New Jersey Health Foundation, Inc. (NJHF)
Cardiac State-of-Health Monitoring through ECG+SCG	\$35,000	Francis Haas	Wei Xue	Mechanical Engineering	New Jersey Health Foundation, Inc. (NJHF)
Design, construction, and evaluation of implants for vocal fold alteration and reconstruction *Resubmission	\$747,644	Amir Miri Ramsheh		Mechanical Engineering	McGill University
SEE (8)	\$1,564,662				
STEAM Academy	\$10,383	Eric Milou	Kara Ieva	Earth & Environment Dean	American Mathematical Society (AMS)
Network Analysis of Ancient Mineral Chemistry to Reconstruct the Redox Environments of Early Life: Building the Foundation for BioCatalysis (NetBFBC)	\$422,161	Elisha Moore	Stephanie Spielman	Environmental Science	National Science Foundation (NSF)
Air Mountain Presents the Shaker Shield	\$50,000	Chuck McGlynn	Cheng Zhu	Geography, Planning, and Sustainability	Venture Well
National Guard Facilities GIS Internship Program, Year 4	\$172,906	John Hasse		Geography, Planning, and Sustainability	NJ Dept. of Military and Veteran Affairs (NJDMVA)
NJ MAP Operational Support 2019 - Dodge	\$77,506	John Hasse		Geography, Planning, and Sustainability	The Geraldine R. Dodge Foundation
Investigating Mechanisms for Post-Depositional Heating in Sedimentary Basins: A case study in the Michigan Basin, USA	\$54,865	Andrea Goddard		Geology	American Chemical Society- Petroleum Research Fund (ACS PRF)
Collaborative Research: Diagenetic controls on the preservation of soft tissues and biomolecules in fossil bones	\$584,725	Paul Ullmann		Geology	National Science Foundation (NSF)

Testing modes of ENSO variability: The spatial expression of tropical variability during the Last Glacial Maximum	\$192,116	Gerald Rustic		Geology	National Science Foundation (NSF)
SOM (29)	\$11,758,172				
Translating Novel Treatments for Fragile X Syndrome from the Fly to the Mouse Model	\$45,000	Sean McBride		Cell Biology	FRAXA Research Foundation
Next Generation Oligodendrocyte Targeted Gene Therapy For Canavan Disease	\$1,207,500	Paola Leone	Jeremy Francis	Cell Biology & Neuroscience	National Institutes of Health (NIH)
Effects of Repetitive Mild TBI on Flexible Attention and the Norepinephrine Transmitter System PI will be Barry Waterhouse	\$533,062	Barry Waterhouse	Daniel Chandler,Rachel Navarra	Cell Biology & Neuroscience	New Jersey Commission on Brain Injury Research
Catecholamine modulation of early visual sensory signal processing and performance of a signal detection task.	\$442,750	David Devilbiss	Barry Waterhouse,Rachel Navarra	Cell Biology & Neuroscience	National Institutes of Health (NIH)
TBI, flexible attention and the locus coeruleus-norepinephrine transmitter system	\$437,037	Barry Waterhouse	Daniel Chandler,Rachel Navarra	Cell Biology & Neuroscience	National Institutes of Health (NIH)
Gene Therapy for Amyotrophic Lateral Sclerosis Targeting Dysregulated Energy Metabolism	\$35,000	Paola Leone	Jeremy Francis	Cell Biology & Neuroscience	New Jersey Health Foundation, Inc. (NJHF)
Neurobiological and behavioral predictors of psychosocial stress-induced opioid seeking	\$27,725	Daniel Manvich		Cell Biology & Neuroscience	New Jersey Health Foundation, Inc. (NJHF)
Using mouse genetics to accelerate research of social behavior mechanisms	\$23,750	Benjamin Rood		Cell Biology & Neuroscience	New Jersey Health Foundation, Inc. (NJHF)
The role of poly(ADP-ribose) glycohydrolase in tumorigenesis	\$35,000	Dmitriy Markov		Cell Biology & Neuroscience	New Jersey Health Foundation, Inc. (NJHF)
Electroencephalographic (EEG) Patterns and Catecholamine Efflux in Prefrontal Cortex Changes Following Repetitive Mild Traumatic Brain Injury	\$180,000	David Devilbiss		Cell Biology & Neuroscience	New Jersey Commission on Brain Injury Research
2019 Summer Medical Research Fellowship Program (SMRFP)	\$25,000	Carl Hock		Cell Biology & Neuroscience	New Jersey Health Foundation, Inc. (NJHF)
2017-2018 Excellence in Research Award	\$1,000	Paola Leone		Cell Biology & Neuroscience	New Jersey Health Foundation, Inc. (NJHF)
Child Abuse Research Education & Service (CARES) Institute Conference	\$69,934	Esther Deblinger		Child Abuse Research Education & Service Institute (CARES)	Help For Children
Child Abuse Research Education & Service (CARES) Institute Trauma-Focused Cognitive Behavioral Therapy (TF-CBT) Research Project	\$69,937	Esther Deblinger		Child Abuse Research Education & Service Institute (CARES)	Help For Children
RowanSOM Curriculum Initiative in Developmental Medicine	\$25,000	Wendy Aita	Jennifer LeComte	Developmental Disabilities	American Academy of Developmental Medicine and Dentistry
Model State-Supported Area Health Education Centers	\$74,407	Joshua Coren	Xitlalichomiha O'Dell	Family Medicine	Health Resources and Services Administration (HRSA)
Interscalene Brachial Plexus Blockade Utilizing Liposomal Bupivacaine: Opioid Consumption Patterns Following Arthroscopic Shoulder Surgery - OSET Conference Travel Grant	\$630	Shauna Goetz		Graduate Medical Education	Arthrex
Manipulating Apoptotic Thresholds in Cancer	\$2,296,018	Randy Strich	Jan Jezek	Molecular Biology	National Institutes of Health (NIH)
Stress Regulated Mitochondrial Dynamics	\$2,012,500	Randy Strich	Jan Jezek,Kai-Ti Chang	Molecular Biology	National Institutes of Health (NIH)
Determining the Safety of Silver Oxide-Coated Biomaterials In Vivo	\$35,000	Renee Demarest	Jeffrey Hettinger,Lei Yu	Molecular Biology	New Jersey Health Foundation, Inc. (NJHF)
Cross-talk between autophagy and cell death pathways	\$1,811,250	Katrina Cooper		Molecular Biology	National Institutes of Health (NIH)
A Fluorescent Probe to Explore a Novel Drug Binding Site on SIRT2 Deacetylase	\$31,000	Brian Weiser		Molecular Biology	New Jersey Health Foundation, Inc. (NJHF)
Targeting podoplanin to prevent and treat oral cancer	\$32,992	Gary Goldberg		Molecular Biology	National Institutes of Health (NIH)
The Cdk8 kinase module and the Great Wall kinase together regulate cell fate decisions	\$35,000	Katrina Cooper		Molecular Biology	New Jersey Health Foundation, Inc. (NJHF)
Silencing GFAP and S100B: A neuroprotective therapeutic strategy for brain injury and neurodegenerative diseases.	\$35,000	Nimish Acharya	Bradford Fischer,Robert Nagele,Venkateswar Venkataraman	New Jersey Institute for Successful Aging (NJISA)	New Jersey Health Foundation, Inc. (NJHF)
Cholinergic receptor role in brain amyloid deposition	\$149,820	Nimish Acharya	Bradford Fischer,Venkateswar Venkataraman	New Jersey Institute for Successful Aging (NJISA)	Alzheimer's Association
Use of Autoantibody Profiles to Clarify the Relationship between Postoperative Delirium and Alzheimer's Disease and Related Dementias	\$2,029,610	Robert Nagele		New Jersey Institute for Successful Aging (NJISA)	Johns Hopkins University

Proposals
October 1, 2018 - December 31, 2018

OPEND-PORT to Life	\$35,000	Richard Jermyn	Linda Boyd	Rehabilitation Medicine	New Jersey Health Foundation, Inc. (NJHF)
FY19 EOF - Graduate Biomedical	\$22,250	Linda Boyd		School of Osteopathic Medicine Dean	The New Jersey Office of the Secretary of Higher Education (OSHE)
RU Total (139)		\$47,448,626			