DIVISION OF UNIVERSITY RESEARCH STAFF

Beena Sukumaran, Ph.D.

Vice President for Research

Joanie Schneider

Managing Administrative Assistant

Office of Research

Sarah Piddington

Eric Gregory Assistant VP for Research Audit Compliance Specialist

Kathy Grady Secretary to AVP

Jasmine Cooper Graduate Research Services

Office of Proposal Development

Steve Robishaw

Carol Parmalee

Proposal Development Manager

Proposal Development Secretary

Office of Research Compliance

Sreekant Murthy Chief Research Compliance

Officer

Patricia Gessner IRB Program Assistant

Katelynn Huff Research Compliance

Secretary

Jeffrey Lenz Research Compliance Specialist

ROWAN INNOVATIONS STAFF

Jeannie Nevelos Managing Director **Rickie Jones Budget Coordinator** **Taryn Riggs** Marketing Specialist

Office of Technology Commercialization

Yatin Karpe

Rick Kitei

Director of Technology Commercialization

Patent Portfolio Manager



Division of University Research Sam Jones Innovation Center Suite 103 Mullica Hill, NJ 08062 rowan.edu/research

ANNUAL REPORT

2017-2018



OFFICE OF SPONSORED PROGRAMS



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| Unit Comparison Data Individual Unit Activity •Administration •College of Communication and Creative Arts •School of Earth and Environment | . 13-15 . 16-17 . 18 . 19-20 . 21-23 |
| Unit Comparison Data Individual Unit Activity • Administration • College of Communication and Creative Arts • School of Earth and Environment • College of Education | . 13-15 . 16-17 . 18 . 19-20 . 21-23 |
| Unit Comparison Data Individual Unit Activity •Administration •College of Communication and Creative Arts •School of Earth and Environment •College of Education •Henry M Rowan College of Engineering / SJTP | . 13-15 16-17 18 19-20 21-23 24-33 34-35 |
| Unit Comparison Data Individual Unit Activity • Administration • College of Communication and Creative Arts • School of Earth and Environment • College of Education • Henry M Rowan College of Engineering / SJTP • College of Humanities and Social Sciences | . 13-15 . 16-17 . 18 . 19-20 . 21-23 24-33 36 |
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SPONSORED PROGRAMS STAFF

Pre-Award Staff

Main Campus

Stephanie LezotteLisa PowellCheryl TurleyVicki LexDirector, OSPProposal SpecialistProposal SpecialistContract Specialist

Medical Schools

Mui WhetstoneJonathan PhillipeCourtney BlairDirector, OSP MedicalProposal SpecialistProposal Specialist

Debbie DeFelice

Secretary, Sponsored Programs Pre-Award

Post-Award Staff (Office of Grant & Contract Accounting)

Rita PiccioniBeth SantiniSheila LewisMarcus SmithDirector, GCASr. Post Award SpecialistPost Award SpecialistPost Award Specialist

Lacey MurphyJose Garcia-CruzPost Award SpecialistPost Award Specialist

Garcia-Cruzvard Specialist
Ewa Mollini
Secretary, GCA

School of Osteopathic Medicine Proposals Continued

| Rehabilitation Medicine | | | | | |
|--|----------------------|---|------------------|---------|--|
| Title | Project Investigator | Sponsor | Requested Amount | | |
| An Exploration in the Utilization of the Listener-Selected Music in Chronic Pain Management | Bailey, James | American Osteopathic Association (AOA) | \$ | 149,996 | |
| Rowan University SOM Opioid Education for Healthcare Professionals | Jermyn, Richard | NJ Department of Health | \$ | 219,561 | |
| The Effect of Music Meditation on Reducing Opioid Use in Patients with Non-Malignant Chronic Pain | Jermyn, Richard | American Osteopathic Association (AOA) | \$ | 83,610 | |
| Opioid Education for Oral Health Workforce Program | Jermyn, Richard | Health Resources and Services Administration (HRSA) | \$ | 399,627 | |
| Prospective, Multicenter, Cohort Study of the Cost-Effectiveness of Osteopathic Manipulative Treatment for Chronic Low Back Pain | Jermyn, Richard | American Osteopathic Association (AOA) | \$ | 340,468 | |
| Development and Comparative Pilot Testing of OPEND/PORT to Life to Prevent Fatal Overdose in Patients Taking Opiates by Training them to Train Peers to Administer Naloxone to Them as Part of a Personal Overdose Response Plan | Jermyn, Richard | National Institutes of Health (NIH) | \$ | 750,000 | |
| New Jersey Collaborative to Improve Access to Overdose Treatment. | Jermyn, Richard | NJ Department of Human Services | \$ | 999,705 | |

Acaemic Affairs

| Title | Project Investigator | Sponsor | Requested Amount |
|---|----------------------|---|------------------|
| Rowan SOM Summer Pre Medicine & Research Program (PREP) | Boyd, Linda | NJ Department of Education (NJDE) | \$ 78,394 |
| National HCOP Academy to Support Careers in Osteopathic Medicine | Boyd, Linda | Health Resources and Services Administration (HRSA) | \$ 3,200,000 |
| Relationship of Preceptor Entrustment Decisions with Students' Clinical Performance | Wang, Shiyuan | American Association of Colleges of Osteopathic Medicine | \$ 4,864 |

Executive Summary

During FY-2018, the Office of Sponsored Programs received grant awards totaling \$39M. These awards include grants and contracts from government, industry, and private sources. The Office of Corporate and Foundation Relations within University Advancement received an additional \$600k in grant funding from individuals, corporations, and foundations to support faculty scholarly and service activities.

FY-2018 Rowan University raised a total of \$39.6M for sponsored programs and projects, an increase of 14% in funds received from last year.

Dr. Beena Sukumaran Vice President for Research

Total External Funds Raised

| Unit | | | | niversity ancement | Department |
|---------------------------------|--------------|----|-----------|-----------------------|---|
| | | \$ | - | \$ 4,976 | Academic Success Center |
| | | \$ | - | \$ 3,000 | Advancement |
| | | \$ | 499,103 | \$ - | CHAMP/GEAR UP |
| Administration | 3,220,791 | \$ | 18,000 | \$ - | Division of Research |
| | | \$ | 2,108,551 | \$ 25,000 | EOF |
| | | \$ | 275,000 | \$ - | Global Learning and Partners International Center/English Language |
| | | \$ | 256,250 | \$ - | Programs |
| | | \$ | 30,911 | \$ | VR Lab |
| | \$ 51,180 | \$ | - | \$ 51,180 | |
| Communication and Creative Arts | 58,600 | \$ | 20,000 | \$ - | Art Department |
| | | \$ | - | \$ 35,000 | Art Gallery |
| | | \$ | 3,600 | \$ - | Writing Arts |
| Cooper Medical School | 11,375,976 | \$ | 1,300,929 | \$ - | Biomedical Sciences Dean's Office |
| | | \$ | 1,000 | \$ _ | Multicultural Affairs |
| | | \$ | 1,023,142 | \$ 65,000 | Geography, Planning, and Sustainability |
| Earth & Environment | \$ 1,661,171 | \$ | 573,029 | \$ - | Geology |
| - | | \$ | 2,287,632 | \$ 24,962 | Center for Access Success and Equity |
| | | \$ | 109,526 | \$ | Educational Services and Leadership |
| Education | 5 2,512,434 | \$ | 16,225 | \$ - | Interdisciplinary/ Inclusive Education |
| | | \$ | 74,089 | \$ - | Language, Literacy, & Sociocultural Education |
| | | \$ | 1,141,518 | \$ _ | Biomedical Engineering |
| | | \$ | 3,008,273 | \$ - | Chemical Engineering |
| | | \$ | 2,490,236 | \$ - | Civil and Environmental Engineering |
| Engineering | 7,515,126 | \$ | 150,000 | \$ 35,000 | Dean's Office |
| | | \$ | 164,757 | \$ - | Electrical/Computer Engineering |
| | | \$ | 14,062 | \$, | ExEED |
| | | \$ | 206,280 | \$ 10,000 | Mechanical Engineering |

School of Osteopathic Medicine Proposals Continued

Molecular Biology

| Title | Project Investigator | Sponsor | Requested Amount |
|--|----------------------|---------------------------------------|------------------|
| | | | |
| Organellar Communication and | | | |
| Chemotherapeutics | Strich, Randy | National Institutes of Health | \$ 442,750 |
| Cysteine Disulfide Targeting in Cancer Drug Development | Caradonna, Sal | New Jersey Health Foundation, Inc. | \$ 35,000 |
| Excellence in Research | Ellis, Ronald | New Jersey Health Foundation, Inc. | \$ 1,000 |
| Manipulating Apoptotic Thresholds in Cancer | Strich, Randy | National Institutes of Health | \$ 2,174,944 |
| Regulation of cell fate decisions in yeast | Cooper, Katrina | National Institutes of Health | \$ 2,006,400 |
| Targeting podoplanin to prevent and treat oral cancer | Goldberg, Gary | National Institutes of Health | \$ 483,000 |
| Developing MASL to Combat Oral Cancer | Goldberg, Gary | Sentrimed | \$ 137,873 |
| Roles of cadherins and podoplanin in contact normalization | Goldberg, Gary | National Institutes of Health (NIH) | \$ 2,012,500 |
| Developing MASL to Combat Oral Cancer | Goldberg, Gary | Sentrimed | \$ 137,873 |
| | | | |
| A novel approach to treat oral cancer | Goldberg, Gary | Harrington Discovery Institute | \$ 100,000 |
| Coordinating nuclear and mitochondrial stress response | Strich, Randy | National Institutes of Health (NIH) | \$ 2,012,500 |

Graduate Medical Education

| Title | Project Investigator | Sponsor | Requested Amount |
|--------------------------------|----------------------|----------------------------|------------------|
| St. Jude Cardiology Fellowship | Kaiser Smith, Joanne | St Jude Medical Foundation | \$ 35,600 |

Pathology

| Title | Project Investigator | Sponsor | Requested Amount |
|---------------------------------------|----------------------|-------------------------|------------------|
| A Comprehensive Center for Huntington | | | |
| Disease | Mccormack, Michael | NJ Department of Health | \$ 310,383 |

School of Osteopathic Medicine Proposals Continued

NJ Institute for Successful Aging

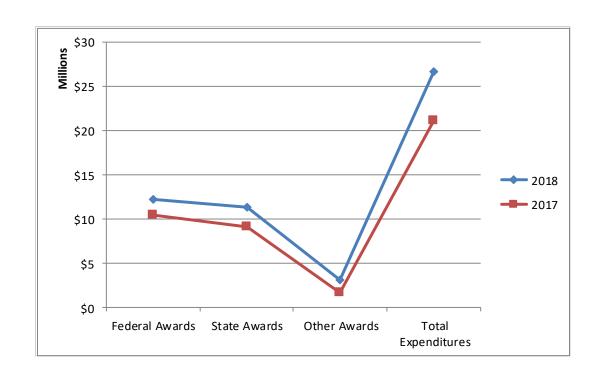
| Title | Project Investigator | Sponsor | Requested Amount | | |
|---|----------------------|--|------------------|-----------|--|
| House Calls and Behavioral Health Integration: Addressing Mental Health Literacy and Depression Care | Perweiler, Elyse | Community Foundation of South Jersey | \$ | 50,000 | |
| A Randomized Placebo-Controlled Study of Metformin Safety and Effects on Cognition, Anxiety, Sleep, Physiologic and Biochemical Biomarkers in Fragile X Syndrome | McBride, Sean | U.S. Department of Defense | \$ | 3,601,224 | |
| Randomized Placebo Controlled Study of Treatment with the PDE-4 Inhibitor Roflumilast on Safety, Cognition, Physiologic and Biomarkers in Fragile X Syndrome | McBride, Sean | U.S. Department of Defense | \$ | 159,560 | |
| Self Management of Chronic Conditions | Pruchno, Rachel | National Institutes of Health | \$ | 3,829,012 | |
| Use of Autoantibody Profiles to Clarify the Relationship between Postoperative Delirium and Alzheimer's Disease and Related Dementias | Nagele, Robert | Johns Hopkins Bloomberg School of Public Health | \$ | 2,029,610 | |
| The Effect of OMT and a Novel Exercise Program for Falls Prevention in the Elderly | Noll, Donald | American Osteopathic Association (AOA) | \$ | 119,320 | |
| Creating Great Places to Age | Perweiler, Elyse | New Jersey Future | \$ | 10,000 | |
| "Inspired"- A Unique Exploration of the Human Brain and Memory | Perweiler, Elyse | Wakefern Foundation | \$ | 25,000 | |
| The Gerontologist (TG) Editor in Chief Editorial Office Stipend | Pruchno, Rachel | Gerontological Society Of America | \$ | 71,000 | |
| "Inspired"- A Unique Exploration of the Human Brain and Memory | Perweiler, Elyse | Wakefern Foundation | \$ | 25,000 | |
| Differentiating between non-MCI and statistically determined MCI subtypes using serum antibodies. | Libon, David | Rush University (Rush Alzheimer's Disease Core Center) | \$ | 30,000 | |
| NJ Geriatric Workforce Enhancement Project: 4th Year Administrative Extension | Chopra, Anita | Health Resources and Services Administration (HRSA) | \$ | 850,000 | |
| Multiple Chronic Conditions: How Illness Representations and Neighborhood Characteristics Impact Self-Management & Health Trajectories | Pruchno, Rachel | National Institutes of Health (NIH) | \$ | 3,847,126 | |
| Effects of Hurricane Sandy on Functional Limitation Trajectories of Older Adults | Pruchno, Rachel | National Institutes of Health (NIH) | \$ | 356,298 | |

Total External Funds Raised

| | | | \$ 103,385 | \$ - | Dean's Office | | | |
|-------------------------------------|------|------------|------------------|---------------|-----------------------------------|-------------|---------|---|
| Humanities & | \$ | 244,876 | \$ 59,208 | \$ - | History | | | |
| Social Sciences | Ψ | 244,070 | \$ 14,953 | \$ - | Law and Justice | | | |
| | | | \$ 67,330 | \$ - | Political Science & Economics | | | |
| | | | | | | | | |
| Performing Arts | | 40.000 | \$ - | \$ 25,000 | Music | | | |
| - Choming Arts | \$ | 40,000 | \$ - | \$ 15,000 | Theatre & Dance | | | |
| | | | \$ 4,864 | \$ - | Academic Affairs | | | |
| | | | \$ 4,337,032 | \$ - | CARES Institute | | | |
| | | | \$ 2,251,777 | \$ - | Cell Biology | | | |
| | | | \$ 405,440 | \$ - | Family Medicine | | | |
| School of | | | \$ - | \$ 10,000 | Graduate Medical Eduation | | | |
| Osteopathic | \$ | 10,623,549 | \$ 25,531 | \$ - | Internal Medicine | | | |
| Medicine | · | , , | \$ 713,600 | \$ - | Molecular Biology | | | |
| | | | \$ 2,132,936 | \$ - | NJ Institute for Successful Aging | | | |
| | | | | | | \$ 6,254 | \$ - | Obstetrics and Gynecology Osteopathic Manipulative Medi- |
| | | | \$ 2,260 | \$ - | cine | | | |
| | | | \$ 308,450 | \$ - | Pathology | | | |
| | | | \$ 197,890 | \$ - | Psychiatry | | | |
| | | | \$ 227,515 | \$ - | Rehabilitation Medicine | | | |
| | | | \$ 332,149 | \$ - | Biological Sciences | | | |
| | | | \$ 884,607 | \$ - | Chemistry and Biochemistry | | | |
| | | | \$ 426,383 | \$ _ | Computer Science | | | |
| Science & | _ | | \$ 60,000 | \$ - | Dean's Office | | | |
| Mathematics / Health Professions | \$ | 2,348,784 | \$ 155,884 | \$ - | Mathematics | | | |
| Health FIUICSSIUIIS | | | | | | | | |
| | | | \$ 70,000 | \$ - | Molecular & Cell Biosciences | | | |
| | | | \$ 269,768 | \$ - | Physics & Astronomy | | | |
| | | | \$ 149,993 | \$ - | Psychology | | | |
| | | | | | | | | |
| TOTAL | \$ 3 | 39,652,487 | \$ 39,053,369 | \$ 599,118 | | | | |

Research Expenditures

| | 2018 Expenditures | | 2017 penditures | Comparison | | |
|--------------------|----------------------|----|--------------------|------------|-----------|--|
| Federal Awards | \$ 12,270,678 | \$ | 10,446,280 | \$ | 1,824,398 | |
| State Awards | \$ 11,298,766 | \$ | 9,094,755 | \$ | 2,204,011 | |
| Other Awards | \$ 3,091,913 | \$ | 1,639,032 | \$ | 1,452,881 | |
| Total Expenditures | \$ 26,661,357 | \$ | 21,180,067 | \$ | 5,481,290 | |



School of Osteopathic Medicine Proposals Continued

| Cell Biology (continued) | | | |
|---|----------------------|---|------------------|
| Title | Project Investigator | Sponsor | Requested Amount |
| Clinical Gene Therapy for Canavan Disease | Leone, Paola | Wilf Family Foundation | \$ 250,000 |
| Management of ASD through a coordinated program of biomedical research, clinical innovation and professional training in New Jersey | McBride, Sean | The Governor's Council for Medical Research and Treat- ment of Autism | \$ 4,000,000 |
| Functional Neuroanatomy Underlying Psychosocial Stress-Induced Cocaine Seeking | Manvich, Daniel | National Institutes of Health (NIH) | \$ 528,448 |
| Stress-induced mechanisms of opioid dependence | Chandler, Daniel | Alexandrine and Alexander L. Sinsheimer Foundation | \$ 200,000 |
| Molecular mechanisms of mitochondrial transcription and replication | Temiakov, Dmitry | National Institutes of Health (NIH) | \$ 3,414,751 |
| Psychostimulant actions on early stage sensory processing and signal detection | Waterhouse, Barry | National Institutes of Health (NIH) | \$ 1,991,150 |
| Stress in the nucleolus and the DNA damage response | Pestov, Dimitri | National Institutes of Health (NIH) | \$ 161,000 |

Psychiatry

| Title | Project Investigator | Sponsor | Reque | sted Amount |
|---|----------------------|---|-------|-------------|
| NJCDD Developmental Disability Health & Wellness | Aita, Wendy | NJ Council on Developmental Disabilities | \$ | 125,000 |
| Rowan University Community Mental Health Awareness Training Program | Scheinthal, Stephen | NJ Department of Human Services | \$ | 374,001 |
| The Effectiveness of Emotional Regulation Training on Coping with the Trauma of Bullying in Autistic Adolescents | Aita, Wendy | Organization for Autism Research (OAR) | \$ | 30,000 |
| The Moral Economy of Innovation | Light, Donald | Carnegie Corporation of New York | \$ | 196,998 |

Family Medicine

| Title | Project Investigator | Sponsor | Requested Amount |
|---|----------------------|---|------------------|
| DMHAS SBIRT Expansion Project | Coren, Joshua | NJ Department of Health | \$ 1.291.964 |
| DINITIAO OBIICI Expansion i Toject | Coren, ooshaa | No Department of Fleatur | Ψ 1,201,304 |
| Osteopathic Philosophy and Differences in Communication, Com- | | | |
| passion/Empathy, or Patient Satisfaction Grant | Olson, Aubrey | American Osteopathic Association (AOA) | \$ 75,000 |

School of Osteopathic Medicine Proposals Continued

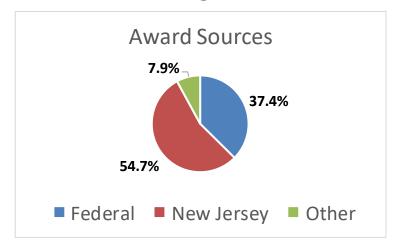
Cell Biology

| Cell Biology | | | |
|--|----------------------|--|------------------|
| Title | Project Investigator | Sponsor | Requested Amount |
| Does acute stress chronically alter locus coeruleus projections to the amygdala to drive anxiety? | Chandler, Daniel | National Institutes of Health | \$ 2,012,500 |
| Dead box RNA helicase 24: Regulation of transcription and stress response | Pestov, Dimitri | National Institutes of Health | \$ 48,300 |
| Structural dynamics of RNAP-promoter complex in late transcription initiation | Borukhov, Sergei | University of California, Los Angeles | \$ 523,250 |
| Persistent effects of acute stress on opioid signaling in the brain | Chandler, Daniel | New Jersey Health Foundation, Inc. | \$ 35,000 |
| Impact of acute stress on opioid signaling in the locus coeruleus | Chandler, Daniel | Whitehall Foundation | \$ 259,909 |
| Effects of stress on information flow in rat working memory circuitry | Devilbiss, David | New Jersey Health Foundation, Inc. | \$ 35,000 |
| 2017 Summer Medical Research Fellowship Program (SMRFP) | Hock, Carl | New Jersey Health Foundation, Inc. | \$ 25,000 |
| Gene Therapy Targeting Oligodendroglia For White Matter Disorders | Leone, Paola | National Institutes of Health | \$ 2,380,987 |
| The role of poly(ADP-ribose) glycohydrolase in tumorigenesis | Markov, Dmitriy | New Jersey Health Foundation, Inc. | \$ 35,000 |
| Unconventional activation of the DNA damage -response protein kinase ATM | Pestov, Dimitri | New Jersey Health Foundation, Inc. | \$ 35,000 |
| Ribosome as a target for iron-mediated oxidative damage | Shcherbik, Natalia | New Jersey Health Foundation, Inc. | \$ 35,000 |
| Structural Dynamics of RNAP-Promoter Complex in Late Transcription Initiation | Borukhov, Sergei | University of California, Los Angeles | \$ 603,750 |
| Impact of stress-induced circuit-specific changes in locus coeruleus opioid signaling on anxiety-like behavior | Chandler, Daniel | National Institutes of Health | \$ 2,012,500 |
| Locus coeruleus dysfunction as a critical link between anxiety-like behavior and opioid abuse | Chandler, Daniel | Brain and Behavior Research Foundation | \$ 70,000 |
| Stress and CRF modulation of sensory processing underlying cognitive flexibility | Devilbiss, David | National Institutes of Health | \$ 415,300 |

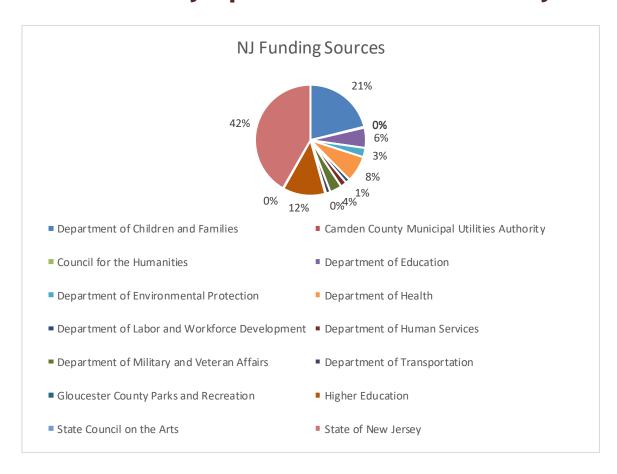
Total Grant Activity

| Units | Awa | | | osals | |
|-------------------------------------|-------------------|-------------------|----------------|------------------|--|
| | FY18 | FY17 | FY18 | FY17 | |
| Administration | 14 \$3,220,791 | 13 \$3,181,724 | 8 \$390,675 | 8 \$7,025,010 | |
| | 2 | | 3 | 0 | |
| Rohrer College of Business | \$51,180 | 0 \$0 | \$112,373 | \$0 | |
| College of Communication & Creative | 6 | 1 | 5 | 3 | |
| Arts | \$58,600 | \$6,000 | \$83,600 | \$37,000 | |
| Callege of Education | 13 | 11 | 21 | 33 | |
| College of Education | \$2,512,434 | \$1,217,585 | \$10,287,125 | \$15,595,250 | |
| School of Earth and Environment | 13 | 9 | 13 | 16 | |
| School of Earth and Environment | \$1,661,171 | \$707,247 | \$1,102,985 | \$2,533,402 | |
| Henry M. Rowan College of | 41 | 42 | 102 | 100 | |
| Engineering / SJTP | \$7,515,126 | \$7,036,699 | \$39,346,130 | \$34,490,270 | |
| College of Science & Mathematics / | 30 | 24 | 89 | 92 | |
| SHP | \$2,348,784 | \$1,815,996 | \$13,250,133 | \$20,164,702 | |
| College of Humanities and Social | 6 | 5 | 12 | 4 | |
| Sciences | \$244,876 | \$218,879 | \$2,250,055 | \$876,515 | |
| Sabad of Ostoonathia Madisina | 34 | 41 | 73 | 68 | |
| School of Osteopathic Medicine | \$10,623,549 | \$18,295,913 | \$60,224,932 | \$39,013,313 | |
| Cooper Medical School of Rowan | 15 | 12 | 24 | 20 | |
| University | \$11,375,976 | \$1,541,905 | \$21,119,407 | \$5,879,435 | |
| College of Porforming Arts | 2 | 2 | 3 | 6 | |
| College of Performing Arts | \$40,000 | \$33,700 | \$82,433 | \$155,605 | |
| Total Number | 176 | 160 | 353 | 350 | |
| Total Amount | \$39,652,487 | \$34,055,648 | \$148,249,848 | \$125,770,502 | |

All Funding Sources



New Jersey Sponsored Grant Activity



| New Jersey Sponsors | | <u>Number</u> | <u>Amount</u> |
|---|-------|---------------|------------------|
| Camden County Municipal Utilities Authority | | 1 | \$ 53,177 |
| Council for the Humanities | | 1 | \$ 5,000 |
| Dept. of Children and Families (NJDCF) | | 2 | \$ 4,548,565 |
| Dept. of Education | | 3 | \$ 1,272,534 |
| Dept. of Environmental Protection | | 3 | \$ 582,176 |
| Dept. of Health | | 4 | \$ 1,649,361 |
| Dept. of Human Services | | 4 | \$ 389,235 |
| Dept. of Labor and Workforce Development | | 1 | \$ 275,000 |
| Dept. of Military and Veteran Affairs | | 5 | \$ 748,806 |
| Dept. of Transportation | | 4 | \$ 280,614 |
| Gloucester County Parks & Recreation | | 1 | \$ 59,208 |
| Higher Education | | 6 | \$ 2,674,404 |
| State Council on the Arts | | 3 | \$ 35,000 |
| State of New Jersey | | 1 | \$ 9,000,000 |
| | Total | 39 | \$ 21,573,080 |

School of Osteopathic Medicine Awards Continued & Proposals

Family Medicine

| r arring modifie | | | | |
|--|------------------------|---|----------------|---------------------|
| Title | Principal Investigator | Sponsor | Awarded Amount | Indirect Awarded |
| Prevention of Opioid Misuse in Wom- en: Office on Women's Health Preven- tion Awards (OWHPA) | Coren, Joshua | US Department of Human Services | \$ 100,000 | \$ 27,007 |
| 2017 AHEC Program | Coren, Joshua | Health Resources and Services Administration (HRSA) | \$ 304,510 | \$ 9,778 |
| Progenity PRO-109-HCP (CT) | Hudrick, Robert | Progenity | \$ 930 | \$ - |

Proposals

CARES Institute

| o, a teo montato | | | |
|---|---------------------------|---------------------------------|------------------|
| Title | Principal Investigator | Sponsor | Requested Amount |
| Pragmatic Quality Indicator Package (P-QIP) for Measuring EBT Delivery in Community | | The Medical University of South | |
| Practice | Deblinger-Sosland, Esther | Carolina | \$ 120,417 |
| | | NJ Department of Children and | |
| CARES Institute DCP&P Contract FY19 | Finkel, Martin | Families | \$ 4,329,665 |

Osteopathic Manipulative Medicine

| Title | Project Investigator | Sponsor | Requested Amount |
|---|----------------------|--|------------------|
| Excellence in Teaching Award | Bailey, James | New Jersey Health Foundation, Inc. | \$ 1,000 |
| Improving Accurate Prescription writing Amongst Medical Students | Cooley, Danielle | American Association of Colleges of Osteopathic Medi- cine (AACOM) | \$ 3,240 |
| How OMT Impacts Relapse Rates of Non-medical Opioid Users Being Treated with Medically Assisted Treatment | | American Osteopathic Association (AOA) | \$ 99,752 |

Surgery

| Title | Project Investigator | Sponsor | Requested Amount | |
|---|---------------------------|-------------------------------|------------------|--|
| The Gut and Autism: A Metabolomic Study | Stein, Thomas | National Institutes of Health | \$ 1,217,815 | |
| Mechanism of Bacteria adhesion to medical devices: Multiscale Multiphysics simulation | Seyyedhosseinzadeh, Hamid | National Science Foundation | \$ 179,450 | |

OBGYN

| 020111 | | | |
|--|----------------------|-------------------------------|------------------|
| Title | Project Investigator | Sponsor | Requested Amount |
| Ethnic differences in HDL dysfunction during pregnancy: Their association with preterm | | | |
| delivery | Chen, Xinhua | National Institutes of Health | \$ 1,989,587 |

School of Osteopathic Medicine Awards Continued

Molecular Biology

| Molecular Biology | | | | | | |
|---|------------------------|---|----------------|---------------------|--|--|
| Title | Principal Investigator | Sponsor | Awarded Amount | Indirect Awarded | | |
| Manipulating Mitochondrial Dynamics in ALS | Strich, Randy | Boye Foundation | \$ 35,000 | \$ - | | |
| Stress regulated mitochondrial dynamics | Strich, Randy | National Institutes of Health | \$ 31,800 | \$ 11,800 | | |
| Regulation of the Gli protein TRA-1 by co-factors | Ellis, Ronald | National Institutes of Health | \$ 275,310 | \$ 104,310 | | |
| Dissecting the origins of a complex reproductive trait: nematode self fertility | Ellis, Ronald | National Institutes of Health | \$ 275,310 | \$ 104,310 | | |
| Cysteine Disulfide Targeting in Cancer Drug Development | Sal Caradonna | New Jersey Health Founda- tion, Inc. | \$ 35,000 | \$ - | | |
| Dissecting the origins of a complex reproductive trait: nematode self fertility | Ellis, Ronald | National Institutes of Health | \$ 30,590 | \$ 11,590 | | |
| Regulation of the Gli protein TRA-1 by co-factors | Ellis, Ronald | National Institutes of Health | \$ 30,590 | \$ 11,590 | | |

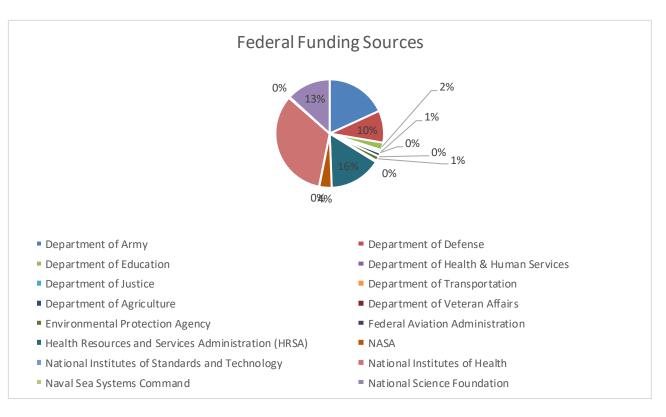
Internal Medicine

| Title | Principal Investigator | Sponsor | Awarded Amount | Indirect Awarded |
|--------------------------------------|------------------------|--|----------------|---------------------|
| Acorda DALF-PS-1029 (Clinical Trial) | Barone, Donald | Acorda | \$ 1,445 | \$ - |
| Baclofen CLR_09_21 (Clinical Trial) | | Sun Pharma Advanced Research Company Ltd. | \$ 19,639 | - |
| Bayer BETACONECT (Clinical Trial) | Barone, Donald | Bayer | \$ 4,447 | \$ - |

Academic Affairs

| Title | Principal Investigator | Sponsor | Awarded Amount | Indirect Awarded |
|---|------------------------|--|----------------|---------------------|
| Relationship of Preceptor Entrustment Decisions with Students' Clinical Performance | | American Association of Colleges of Osteopathic Medicine | \$ 4,864 | \$ - |

Federally Sponsored Grant Activity



| Federal Sponsors | <u>Number</u> | <u>Amount</u> |
|--|---------------|------------------|
| Brookhaven National Laboratory | 1 | \$ 15,000 |
| Council for the Advancement and Support of Education | 1 | \$ 3,000 |
| Department of Army | 5 | \$ 2,678,879 |
| Department of Defense | 2 | \$ 1,410,000 |
| Department of Education | 3 | \$ 330,339 |
| Department of Human Services | 1 | \$ 100,000 |
| Department of Justice | 1 | \$ 14,953 |
| Department of Transportation | 1 | \$ 12,498 |
| Dept. of Agriculture | 1 | \$ 170,000 |
| Environmental Protection Agency | 2 | \$ 203,119 |
| Federal Aviation Administration | 2 | \$ 65,668 |
| Health Resources and Services Administration | 5 | \$ 2,301,936 |
| National Aeronautics and Space Administration | 3 | \$ 547,378 |
| National Institute of Standards and Technology | 1 | \$ 8,919 |
| National Institutes of Health | 28 | \$ 4,913,244 |
| National Science Foundation | 12 | \$ 1,948,994 |
| Naval Sea Systems Command (NAVSEA) | 1 | \$ 45,000 |
| Total | 70 | \$ 14,768,927 |

Other Activity

| <u>Other</u> | <u>Number</u> | <u>Amount</u> |
|--|---------------|-------------------|
| AbbVie | СТ | \$ 6,254 |
| Acorda | CT | \$ 1,445 |
| Advanced Infrastructure Design | 1 | \$ 3,000 |
| Allegheny-Singer Research Institute | 1 | \$ 7,367 |
| American Association of Colleges of Osteopathic Medicine | 2 | \$ 7,124 |
| American Cancer Society | 1 | \$ 20,000 |
| American Chemical Society | 2 | \$ 125,000 |
| American Friends of the Erhard-Jensen Ontological/Phenomenological Initiative | 1 | \$ 3,600 |
| American Heart Association | 2 | \$ 225,500 |
| AT&T Foundation | 1 | \$ 25,000 |
| Autism Speaks | 1 | \$ 4,976 |
| Avante Pharmaceuticals | 1 | \$ 10,000 |
| Bayer | CT | \$ 4,447 |
| Boye Foundation | 2 | \$ 70,000 |
| Bristol-Myers Squibb | 1 | \$ 40,000 |
| California Breast Cancer Research Program | 1 | \$ 39,883 |
| Cardolite Corporation | 1 | \$ 2,800 |
| Cargill, Inc. | 1 | \$ 2,780 |
| Coby Foundation LTD | 1 | \$ 10,000 |
| Community Foundation of South Jersey | 1 | \$ 50,000 |
| COVANTA | 1 | \$ 60,000 |
| Daiichi Sankyo | CT | \$ 7,515 |
| Dolfinger-McMahon Foundation | 1 | \$ 1,000 |
| Energy Creates Energy | 1 | \$ 10,000 |
| F. M. Kirby Foundation | 1 | \$ 20,000 |
| Forman S. Acton Educational Foundation | 2 | \$ 97,856 |
| Genesis Packing Technologies | 1 | \$ 13,080 |
| Johnson Matthey | 2 | \$ 62,145 |
| Kern Family Foundation | 1 | \$ 295,209 |
| Les Paul Foundation | 1 | \$ 25,000 |

School of Osteopathic Medicine Awards Continued

NJ Institute for Successful Aging

| Title | Principal Investigator | Sponsor | Awarded Amount | | Awarded Amount Indirect Awarded | |
|--|------------------------|---|----------------|---------|---------------------------------|---------|
| House Calls and Behavioral Health Integration: Addressing Mental Health Literacy and Depression Care | Perweiler, Elyse | Community Foundation of South Jersey | \$ 50,000 | | \$ | 3,703 |
| Creating Great Places to Age | Perweiler, Elyse | New Jersey Future | \$ | 10,000 | \$ | - |
| Effects of Hurricane Sandy on Functional Limitation Trajectories of Older People | Pruchno, Rachel | National Institutes of Health | \$ | 480,836 | \$ | 145,126 |
| NJ Geriatric Workforce Enhancement Project: 4th Year Administrative Extension | Chopra, Anita | Health Resources and Services Administration (HRSA) | \$ | 850,000 | \$ | 48,741 |
| Blood-based biomarkers for early-stage Alzheimer's disease | Nagele, Robert | National Institutes of Health | \$ | 688,674 | \$ | 259,671 |
| Effects of Hurricane Sandy on Functional Limitation Trajectories of Older People | Pruchno, Rachel | National Institutes of Health | \$ | 53,426 | \$ | 16,125 |

Pathology

| Title | Principal Investigator | Sponsor | Awarded Amount | Indirect Awarded | |
|---|------------------------|-------------------------|----------------|---------------------|--|
| A Comprehensive Center for Huntington Disease | Mccormack, Michael | NJ Department of Health | \$ 308,450 | \$ 4,896 | |

Graduate Medical Education

| Title | Principal Investigator | Sponsor | Awarded Amount | t Indirect Awarded | |
|--------------------------------|------------------------|----------------------------|----------------|-----------------------|--|
| St. Jude Cardiology Fellowship | Smith, Joanne Kaiser | St Jude Medical Foundation | \$ 10,000 | \$ 909 | |

Rehabilitation Medicine

| Title | Principal Investigator | Sponsor | Awarded Amount | Indirect Awarded |
|---|------------------------|-------------------------|----------------|---------------------|
| Daiichi Sankyo DS5565-A-E309 (Clinical Trial) | Jermyn, Richard | Daiichi Sankyo | \$ 7,515 | \$ - |
| Rowan University SOM Opioid Education for Healthcare Professionals | Jermyn, Richard | NJ Department of Health | \$ 220,000 | \$ - |

School of Osteopathic Medicine Awards Continued

Cell Biology

| Title | Principal Investigator | Sponsor | Awarded Amount | Indirect Awarded |
|---|------------------------|---------------------------------------|----------------|---------------------|
| Therepeutic Targeting of Energetic Metabolism in ALS | Francis, Jeremy | Boye Foundation | \$ 35,000 | \$ - |
| Do Cocaine and Chronic Stress Converge in the Basolateral Amygdala? | Loweth, Jessica | National Institutes of Health | \$ 249,000 | \$ 76,155 |
| Translational rescue mechanisms in eukaryotes | Shcherbik, Natalia | National Institutes of Health | \$ 314,025 | \$ 116,525 |
| Heterogeneous properties of LC efferents to modality-specific terminal fields | Waterhouse, Barry | National Institutes of Health | \$ 39,629 | \$ 14,628 |
| Gene Therapy of Canavan Disease | Leone, Paola | Pfizer Inc. | \$ 145,000 | \$ 36,160 |
| Heterogeneous properties of LC efferents to modality-specific terminal fields | Waterhouse, Barry | National Institutes of Health | \$ 342,920 | \$ 117,921 |
| 2018 Summer Medical Research Fellowship Program (SMRFP) | Hock, Carl | New Jersey Health Foundation, Inc. | \$ 25,000 | \$ - |
| Gene Therapy of Canavan Disease | Leone, Paola | Pfizer Inc. | \$ 354,699 | \$ 95,795 |
| Heterogeneous properties of LC efferents to modality-specific terminal fields | Waterhouse, Barry | National Institutes of Health | \$ 38,104 | \$ 13,103 |
| Replication-transcription Switch in Mitochondria | Temiakov, Dmitry | National Institutes of Health | \$ 305,900 | \$ 115,900 |
| Antimicrobial Mechanisms of Specialized Proresolving Mediators | Yin, Kingsley | National Institutes of Health | \$ 402,500 | \$ 152,500 |

Osteopathic Manipulative Medicine

| Octoopatino mampalativo modiomo | | | | |
|--|------------------------|--|----------------|---------------------|
| Title | Principal Investigator | Sponsor | Awarded Amount | Indirect Awarded |
| Improving Accurate Prescription writing Amongst Medical Students | | American Association of Colleges of Osteopathic Medicine (AACOM) | \$ 2,260 | \$ - |

Psychiatry

| Title | Principal Investigator Sponsor Awarded Amo | | Sponsor Awarded Amount | |
|--|--|------------------------------------|------------------------|------|
| Psychological Services for Abused and Neglected Children | | NJ Department of Human Services | \$ 197,890 | \$ - |

Other Activity

| McGill University | 1 | \$ 24,668 |
|---|----|-----------------|
| Mission Solutions Engineering | 3 | \$ 336,595 |
| National Association of School Psychologists | 1 | \$ 11,670 |
| New Jersey Future | 1 | \$ 10,000 |
| New Jersey Health Foundation | 8 | \$ 270,000 |
| Perka, Inc. | 1 | \$ 190,672 |
| Pfizer Inc. | 2 | \$ 499,699 |
| Procter Gamble | 1 | \$ 10,000 |
| Progenity | СТ | \$ 930 |
| PSEG Nuclear, LLC | 1 | \$ 35,000 |
| Rowan-Rutgers Joint Board | 2 | \$ 18,000 |
| Sekisui Chemical Co., Ltd. | 1 | \$ 150,000 |
| Shimadzu | 1 | \$ 78,500 |
| St. Jude Medical Foundation Sun Pharma Advanced Research Company | 1 | \$ 10,000 |
| Ltd. | СТ | \$ 19,639 |
| Syrsa Corporation | 1 | \$ 98,400 |
| TD Charitable Foundation | 1 | \$ 25,000 |
| The Geraldine R. Dodge Foundation | 1 | \$ 65,000 |
| The Institute for Integrative Health | 1 | \$ 26,003 |
| The Joseph Robert Foundation | 1 | \$ 5,000 |
| The Nicholson Foundation | 1 | \$ 24,962 |
| Turnasure LLC | 1 | \$ 4,864 |
| Venture Well | 1 | \$ 26,180 |
| W. K. Kellogg Foundation | 1 | \$ 78,717 |
| William Penn Foundation | 1 | \$ 40,000 |
| TOTAL | 66 | \$ 3,310,480 |

^{*}CT = Clinical Trial

Quarterly Comparison Data

| Comparison of FY18 with FY17 | PR | OPOSALS | | AWARDS |
|------------------------------|-----|----------------|-----|---------------|
| | # | Amount | # | Amount |
| 18 First Quarter | 67 | \$ 17,058,177 | 50 | \$ 8,814,556 |
| 17 First Quarter | 65 | \$ 33,818,470 | 42 | \$ 5,059,935 |
| | | | | |
| 18 Second Quarter | 118 | \$ 35,211,295 | 22 | \$ 3,053,860 |
| 17 Second Quarter | 114 | \$ 29,210,303 | 28 | \$ 6,156,317 |
| | | | | |
| 18 Third Quarter | 93 | \$ 38,804,376 | 35 | \$ 13,690,986 |
| 17 Third Quarter | 98 | \$ 36,264,030 | 37 | \$ 4,430,280 |
| | | | | |
| 18 Fourth Quarter | 76 | \$ 57,227,939 | 68 | \$ 14,093,085 |
| 17 Fourth Quarter | 73 | \$ 26,477,699 | 53 | \$ 18,409,117 |
| | | | | |
| Total: Fiscal Year 2018 | 354 | \$ 148,301,787 | 175 | \$ 39,652,487 |
| Total: Fiscal Year 2017 | 350 | \$ 125,770,502 | 160 | \$ 34,055,649 |

Proposals: \$ 22,479,346

Awards: \$ 5,596,838

School of Osteopathic Medicine Awards & Proposals

| School of Osteopathic Medicine | | | | | | | | |
|-----------------------------------|-----------|---------------|----|--------------|---------------------|--|--|--|
| | PROPOSALS | | | AWARDS | | | | |
| | # | Amount | # | Indirects | Total Amount | | | |
| CARES Institute | 2 | \$ 4,450,082 | 2 | \$ 1,990 | \$ 4,337,032 | | | |
| Cell Biology | 22 | \$ 19,071,845 | 11 | \$ 738,687 | \$ 2,251,777 | | | |
| NJ Institute for Successful Aging | 14 | \$ 15,003,150 | 6 | \$ 473,366 | \$ 2,132,936 | | | |
| Obstetrics and Gynecology | 1 | \$ 1,989,587 | ı | \$ - | \$ 6,254 | | | |
| Rehabilitation Medicine | 7 | \$ 2,942,967 | 1 | \$ - | \$ 227,515 | | | |
| Pathology | 1 | \$ 310,383 | 1 | \$ 4,896 | \$ 308,450 | | | |
| Osteopathic Manipulative Medicine | 3 | \$ 103,992 | 1 | \$ - | \$ 2,260 | | | |
| Psychiatry | 4 | \$ 725,999 | 1 | \$ - | \$ 197,890 | | | |
| Surgery | 2 | \$ 1,397,265 | - | \$ - | \$ - | | | |
| Internal Medicine | - | \$ 3,278,394 | - | \$ - | \$ 25,531 | | | |
| Molecular Biology | 11 | \$ 9,543,840 | 7 | \$ 243,600 | \$ 713,600 | | | |
| Academic Affairs | 3 | \$ 4,864 | 1 | \$ - | \$ 4,864 | | | |
| Graduate Medical Education | 1 | \$ 35,600 | 1 | \$ 909 | \$ 10,000 | | | |
| Family Medicine | 2 | \$ 1,366,964 | 2 | \$ 36,785 | \$ 405,440 | | | |
| Total | 73 | \$ 60,224,932 | 34 | \$ 1,500,233 | \$ 10,623,549 | | | |

<u>Awards</u>

CARES Institute

| Title | Principal Investigator | Sponsor | Awarded Amount | Indirect Awarded |
|---|------------------------|--|----------------|---------------------|
| AGH Center for Traumatic Stress in Children and Adolescents | | Allegheny-Singer Research Institute | \$ 7,367 | \$ 1,990 |
| CARES DCP&P FY18 Contract | | NJ Department of Children and Families | \$ 4,329,665 | \$ - |

OBGYN

| Title | Principal Investigator | Sponsor | Awarded Amount | Indirect Awarded |
|---------------------------------|------------------------|---------|----------------|---------------------|
| AbbVie M12-817 (Clinical Trial) | Nguyen, Maria Bich | AbbVie | \$ 1,724 | \$ - |
| AbbVie M12-671 (Clinical Trial) | Williams, Keith | AbbVie | \$ 4,530 | \$ - |

Cooper Medical School of Rowan University Proposals

Multicultural Affairs

| Title | Principal Investigator | Sponsor | Requested Amount |
|--|----------------------------|--|------------------|
| Assistant Health Coach Certification for the recruitment and entry of disadvantaged students into health and allied health professions | Mitchell-Williams, Jocelyn | Health Resources and Services Administration (HRSA) | \$ 131,787 |
| Primary Urban Partnership (PUP) | Mitchell-Williams, Jocelyn | Dolfinger-McMahon Foundation | \$ 5,250 |

Biomedical Sciences

| Title | Principal Investigator | Sponsor | Requested Amount | |
|--|------------------------|--|------------------|--|
| Emerin regulation of nuclear structure in cancer cell invasion | Holaska, James | Elsa U. Pardee Foundation | \$ 121,991 | |
| Emerin regulation of nuclear architecture during cancer cell invasion | Holaska, James | New Jersey Health Foundation, Inc. | \$ 35,000 | |
| Treatment of alpha-synuclein dysfunction in Parkinson's Disease by marijuana-like compounds | Carrasco, Gonzalo | New Jersey Health Foundation, Inc. | \$ 35,000 | |
| Combined Treatment with Ivabradine and Digoxin as a Novel Strategy to Ameliorate Systolic Heart Failure | Dedkov, Eduard | New Jersey Health Foundation, Inc. | \$ 35,000 | |
| The Role of Bladder Stiffness in the Pathogenesis of Bacterial Urinary Tract Infections | DiSanto, Michael | Rutgers, The State University of New Jersey | \$ 100,000 | |
| Emerin regulation of nuclear architecture during breast cancer cell invasion and metastasis. | Holaska, James | Department of Army | \$ 627,609 | |
| Molecular mechanisms of peripheral inflammatory pain | O'Leary, Michael | New Jersey Health Foundation, Inc. | \$ 35,000 | |
| Development of a novel dual inhibitor of CXCR4 and MCL-1 for the treatment of chemo-resistant Multiple Myeloma | Pandey, Manoj | New Jersey Health Foundation, Inc. | \$ 35,000 | |
| Using Peer Evaluation to Promote Student Understanding and Satisfaction during Team Based Learning Exercises | Swope, David | International Association of Medical Science Educators - IAMSE | \$ 3,000 | |
| Studies of Rgs17 overexpression in morphine-related behaviors | Ferraro, Thomas | University of Pennsylvania | \$ 881,312 | |
| Altered chromatin organization and gene expression in EDMD mutants | Holaska, James | Muscular Dystrophy Association | \$ 299,999 | |
| Emerin regulation of molecular pathways: implications for muscle disease | Holaska, James | National Institutes of Health (NIH) | \$ 483,000 | |
| Supplement for Emerin regulation of molecular pathways: implications for muscle disease | Holaska, James | National Institutes of Health (NIH) | \$ 17,774 | |
| Mutations in Osteoprotegerin Cause Calcium Pyrophosphate Disease | Williams, Charlene | Clement J. Zablocki Veterans Affairs Medical Center | \$ 167,532 | |
| Studies of Rgs17 overexpression in morphine- related behaviors | Ferraro, Thomas | University of Pennsylvania | \$ 881,312 | |
| Emerin regulation of nuclear architecture during breast cancer cell invasion and metastasis | Holaska, James | Foundation for Women's Wellness | \$ 25,000 | |

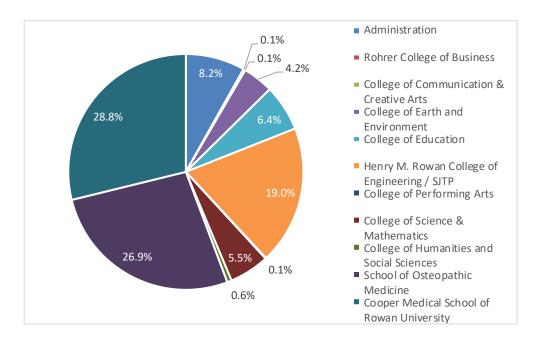
Unit Comparison Data

| Units | Awar | ds | Propo | osals |
|-----------------------------|--------------|--------------|---------------|---------------|
| Omis | FY18 | FY17 | FY18 | FY17 |
| Administration | 14 | 13 | 8 | 8 |
| Administration | \$3,220,791 | \$3,181,724 | \$390,675 | \$7,025,010 |
| Rohrer College of Business | 2 | 0 | 3 | 0 |
| Troniel College of Business | \$51,180 | \$0 | \$112,373 | \$0 |
| College of Communication & | 6 | 1 | 5 | 3 |
| Creative Arts | \$58,600 | \$6,000 | \$83,600 | \$37,000 |
| O-11 | 13 | 11 | 21 | 33 |
| College of Education | \$2,512,434 | \$1,217,585 | \$10,287,125 | \$15,595,250 |
| | 13 | 9 | 13 | 16 |
| School of Earth and | | | | |
| Environment | \$1,661,171 | \$707,247 | \$1,102,985 | \$2,533,402 |
| Henry M. Rowan College of | 41 | 42 | 102 | 100 |
| Engineering / SJTP | \$7,515,126 | \$7,036,699 | \$39,346,130 | \$34,490,270 |
| College of Science & | 30 | 24 | 90 | 92 |
| Mathematics / SHP | \$2,348,784 | \$1,815,996 | \$13,302,072 | \$20,164,702 |
| College of Humanities and | 6 | 5 | 12 | 4 |
| Social Sciences | \$244,876 | \$218,879 | \$2,250,055 | \$876,515 |
| School of Osteopathic | 34 | 41 | 73 | 68 |
| Medicine | \$10,623,549 | \$18,295,913 | \$60,224,932 | \$39,013,313 |
| Cooper Medical School of | 15 | 12 | 24 | 20 |
| Rowan University | \$11,375,976 | \$1,541,905 | \$21,119,407 | \$5,879,435 |
| College of Performing Arts | 2 | 2 | 3 | 6 |
| College of Performing Arts | \$40,000 | \$33,700 | \$82,433 | \$155,605 |
| Total Number | 176 | 160 | 354 | 350 |
| Total Amount | \$39,652,487 | \$34,055,648 | \$148,301,787 | \$125,770,502 |

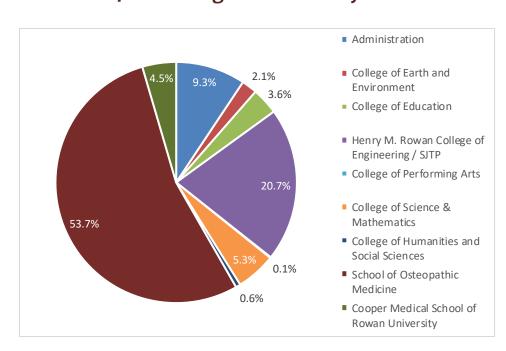
Research Annual Report 2017-2018

Unit Comparison Data

FY 18 Percentage of Awards by Unit



FY 17 Percentage of Awards by Unit



Cooper Medical School of Rowan University Awards & Proposals

Biomedical Sciences

| Biomedical Sciences | | | | | | |
|--|----------------------------|---|--------|-----------|--------|-------------|
| Title | Principal Investigator | Sponsor | Awarde | ed Amount | Indire | ect Awarded |
| Emerin regulation of molecular pathways: implications for muscle disease | Holocka James | National Institutes of Health | ¢. | 228 000 | \$ | 06 200 |
| muscie disease | Holaska, James | | \$ | 228,009 | \$ | 86,388 |
| Health Careers Opportunity Program | Mitchell-Williams, Jocelyn | Health Resources and Services Administration (HRSA) | \$ | 147,450 | \$ | 10,922 |
| Health Careers Opportunity Program | Mitchell-Williams, Jocelyn | Health Resources and Services Administration (HRSA) | \$ | 649,976 | \$ | 48,146 |
| Control of adrenal catecholamine secretion: a novel role for the serotonin | | | | | | |
| transporter | Currie, Kevin | American Heart Association | \$ | 154,000 | \$ | 14,000 |
| Clinical and Genetic Study of Prescription Opioid Addiction | Ferraro, Thomas | Geisinger Medical Center (Prime: National Institutes of Health) | \$ | 16,205 | \$ | 6,140 |
| Combined Treatment with lvabradine and Digoxin as a Novel Strategy to Ameliorate Systolic Heart Failure | Eduard Dedkov | New Jersey Health Foundation, Inc. | \$ | 35,000 | \$ | - |
| Emerin regulation of molecular pathways: implications for muscle disease | Holaska, James | National Institutes of Health | \$ | 17,774 | \$ | 6,734 |
| Emerin regulation of molecular pathways: implications for muscle disease | Holaska, James | National Institutes of Health | \$ | 24,158 | \$ | 24,158 |
| The Role of the Glial Engulfment Receptor Jedi1 in Regulatory Sensory Neuron Function | Currie, Kevin | Vanderbilt University (Prime: National Institutes of Health) | \$ | 28,357 | \$ | 10,744 |

Proposals

Dean's Office

| Title | Principal Investigator | Sponsor | | ested Amount |
|--|----------------------------|--|----|--------------|
| Creating a Pipeline of Physician-Scientists/ Physician-Clinical Researchers by Developing Customized Pathways for Medical Students, Residents/Fellows, and Junior Faculty | Reboli, Annette | Burroughs Wellcome Fund | \$ | 30,000 |
| Comprehensive Research Initiative on the Genomics of Opioid Addiction, Treatment, and Recovery | Reboli, Annette | The State of New Jersey | \$ | 9,000,000 |
| Champions for Health Advancement through Mentoring and Primary Care Partnerships (CHAMPP) | Reboli, Annette | Health Resources and Services Administration (HRSA) | \$ | 1,998,225 |
| PTSD and Opioid Use Disorder: Neuroimaging of mechanistic link | Elman, Igor | National Institutes of Health (NIH) | \$ | 2,845,309 |
| Camden HCOP Academy | Mitchell-Williams, Jocelyn | Health Resources and Services Administration (HRSA) | \$ | 3,199,985 |
| Buprenorphine's Central Mechanism in Opioid Use Disorder | Elman, Igor | The Children's Hospital Corporation | \$ | 125,322 |

Cooper Medical School of Rowan University Awards & Proposals

| Cooper Medical School of Rowan University | | | | | | |
|---|------|---------------|----|------------|---------------|--|
| | PROF | POSALS | | AWARDS | | |
| | # | Amount | # | Indirects | Total Amount | |
| Dean's Office | 6 | \$ 17,198,841 | 5 | \$ 37,589 | \$ 10,074,047 | |
| Biomedical Sciences | 16 | \$ 3,783,529 | 9 | \$ 207,232 | \$ 1,300,929 | |
| Multicultural Affairs | 2 | \$ 137,037 | 1 | \$ - | \$ 1,000 | |
| Total | 24 | \$ 21,119,407 | 15 | \$ 244,821 | \$ 11,375,976 | |

<u>Awards</u>

Dean's Office

| Title | Principal Investigator | Sponsor | Awa | Awarded Amount | | Indirect Awarded |
|--|------------------------|--|-----|----------------|----|---------------------|
| Comprehensive Research Initiative on the Genomics of Opioid Addiction, Treatment, and Recovery | Reboli, Annette | The State of New Jersey | \$ | 9,000,000 | \$ | - |
| Post resuscitation PaCO2 and neurological outcome after cardiac arrest | Roberts, Brian | National Institutes of Health | \$ | 157,464 | \$ | 11,664 |
| NJ Acute Stroke Registry Enhancement Project | Young, Gary | NJ Department of Health | \$ | 499,833 | \$ | - |
| Educating future primary care providers for transforming health care systems | Reboli, Annette | Health Resources and Services Administration (HRSA) | \$ | 350,000 | \$ | 25,925 |
| EOF FY19 - CMSRU | Bryant, Kyhna | New Jersey Higher Education (NJHE) | \$ | 66,750 | \$ | - |

Multicultural Affairs

| Title | Principal Investigator | Sponsor | Awarded Amount | Indirect Awarded |
|---------------------------------|----------------------------|------------------------------|----------------|---------------------|
| | | | | |
| Primary Urban Partnership (PUP) | Mitchell-Williams, Jocelyn | Dolfinger-McMahon Foundation | \$ 1,000 | \$ - |

Unit Comparison Data

| Units | Percentage of T | otal Award \$ | Percentage of Total Proposal # | | |
|---|-----------------|---------------|--------------------------------|-------|--|
| | FY18 | FY17 | FY18 | FY17 | |
| Administration | 8.1% | 9.3% | 2.4% | 2.3% | |
| Rohrer College of Business | 0.1% | 0.0% | 0.8% | 0.0% | |
| College of Communication & Creative Arts | 0.1% | 0.0% | 1.4% | 0.9% | |
| School of Earth and Environment | 4.2% | 2.1% | 3.7% | 4.6% | |
| College of Education | 6.4% | 3.6% | 5.9% | 9.4% | |
| Henry M. Rowan College of Engineering / SJTP | 19.0% | 20.7% | 28.6% | 28.6% | |
| College of Performing Arts | 0.1% | 0.1% | 0.8% | 1.7% | |
| College of Science & Mathematics | 5.9% | 5.3% | 25.4% | 26.3% | |
| College of Humanities and Social Sciences | 0.6% | 0.6% | 3.3% | 1.1% | |
| School of Osteopathic Medicine | 26.8% | 53.7% | 20.6% | 19.4% | |
| Cooper Medical School of Rowan University | 28.7% | 4.5% | 6.7% | 5.7% | |
| Total | 100% | 100% | 100% | 100% | |

Administration Awards & Proposals

| Administration | | | | | | | |
|--|------|------------|----|------------|--------------|--|--|
| | PROP | OSALS | | | | | |
| | # | Amount | # | Indirects | Total Amount | | |
| CHAMP/GEAR UP | 2 | \$ 52,970 | 1 | \$ 14,680 | \$ 499,103 | | |
| Educational Opportunity Fund | 1 | \$ 25,000 | 5 | \$ - | \$ 2,133,551 | | |
| VR Lab | - | \$ - | 1 | \$ 8,970 | \$ 30,911 | | |
| Student Affairs | 1 | \$ 1,225 | - | \$ - | \$ - | | |
| Healthy Campus Initiatives | 1 | \$ 3,500 | - | \$ - | \$ - | | |
| Academic Success Center | 1 | \$ 4,980 | 1 | \$ 452 | \$ 4,976 | | |
| International Center/ English Language Programs | - | \$ - | 2 | \$ 18,982 | \$ 256,250 | | |
| Global Learning and Partners | 1 | \$ 300,000 | 1 | \$ 91,667 | \$ 275,000 | | |
| Division of Research | - | \$ - | 2 | \$ 452 | \$ 18,000 | | |
| VP Advancement | 1 | \$ 3,000 | 1 | \$ - | \$ 3,000 | | |
| Total | 8 | \$ 390,675 | 14 | \$ 134,751 | \$ 3,220,791 | | |

Awards

CHAMP/GEAR UP

| Title | Principal Investigator | Sponsor | Awarded Amount | Indirect Awarded |
|---------------|------------------------|-----------------------------|----------------|------------------|
| CHAMP/GEAR UP | McPherson-Myers, Penny | New Jersey Higher Education | \$ 499,103 | \$ 14,680 |

Educational Opportunity Fund

| Title | Principal Investigator | Sponsor | Awa | arded Amount | Indired | ct Awarded |
|------------------------|------------------------|-----------------------------|-----|--------------|---------|------------|
| EOF FY18 - Main Campus | Singleton, Dawn | New Jersey Higher Education | \$ | 36,049 | \$ | - |
| EOF FY18 Camden | Singleton, Dawn | New Jersey Higher Education | \$ | 24,492 | \$ | - |
| STAR | Singleton, Dawn | AT&T Foundation | \$ | 25,000 | \$ | - |
| EOF FY19 - Camden | Singleton, Dawn | New Jersey Higher Education | \$ | 518,828 | \$ | - |
| FY19 EOF - Glassboro | Singleton, Dawn | New Jersey Higher Education | \$ | 1,529,182 | \$ | - |

International Center/ English Language Programs

| international Genter English Earlyaage Programs | | | | | |
|--|------------------------|----------------------------|----------------|------------------|--|
| Title | Principal Investigator | Sponsor | Awarded Amount | Indirect Awarded | |
| Rowan University Upward Bound Program for English | | | | | |
| Language Learners | Olivencia, Margarita | US Department of Education | \$ 6,250 | \$ 463 | |
| Rowan University Upward Bound Program for English | | | | | |
| Language Learners | Olivencia, Margarita | US Department of Education | \$ 250.000 | \$ 18.519 | |

Global Learning & Partners

| Title | Principal Investigator | Sponsor | Awarded Amount | Ir | ndirect Awarded |
|------------------------------|------------------------|----------------------------------|----------------|------|-----------------|
| Talent Network: Construction | | NJ Department of Labor and Work- | | | |
| Management | Sosa, Horacio | force Development | \$ 275,000 |) \$ | 91,667 |

Division of Research

| DIVISION OF RESearch | | | | |
|---------------------------------|------------------------|---------------------------|----------------|------------------|
| Title | Principal Investigator | Sponsor | Awarded Amount | Indirect Awarded |
| Alzheimer's Journey Coordinator | | | | |
| Certificate Program | Murthy, Sree | Rowan-Rutgers Joint Board | \$ 10,000 | \$ - |
| Alzheimer's Journey Coordinator | | | | |
| Certificate Program | Murthy, Sree | Rowan-Rutgers Joint Board | \$ 8,000 | \$ - |

College of Science & Mathematics Proposals Continued

| Title | Principal Investigator | Sponsor | Requested Amount |
|---|------------------------|------------------------------------|---|
| Effects of a Competition Season and Injury Risk Factors for Musculoskeletal Injury in Collegiate | | New Jersey Health Foundation, | |
| Athletes | Pletcher, Erin | Inc. | \$ 31,500 |
| The Empower Program: Using Motivational | | | |
| Interviewing to Support MBC Patient Self-Advocacy and Decision-Making | Spencer, Leslie | New Jersey Health Foundation, Inc. | \$ 21,484 |
| Building from Your "Storiez® "(BYS): Using a | | | |
| Trauma-Informed Approach for After-School | | New Jersey Health Foundation, | |
| Programming for High School Youth | Vaughn, Nicole | Inc. | \$ 34,925 |
| Navigating cultural distance: Mental health and | | New Jersey Health Foundation, | |
| adaptation for first-generation university students | Weaver, Robert | Inc. | \$ 27,036 |
| PROF Academy: A Model to Enhance Overall Well- Being, Mental Health Practices and Professional | | | |
| Development Among Division III Student Athletes as | | Association for Applied Sport | |
| they Transition from PROF to Professional | Bullard, JoAnne | Psychology | \$ 2,364 |
| | | | |
| Heart Rate and Velocity Based Monitoring of Fatigue | Distance Frie | Eastern Athletic Trainers' | ф 0.000 |
| in Collegiate Soccer Athletes | Pletcher, Erin | Association | \$ 9,928 |
| Feasibility & effects of a novel cycling intervention on | | Brain and Behavior Research | |
| Parkinsonian symptoms and health in schizophrenia | Uygur, Mehmet | Foundation | \$ 35,000 |
| High-speed low-resistance cycling intervention to | | | |
| improve motor and non-motor symptoms in people with Parkinson's disease | Uygur, Mehmet | Davis Phinney Foundation | \$ 31,161 |
| | -73 | , | , |
| Vitamin D deficiency and its relationship to injury, | | Athletic Trainers' Society of New | |
| gender, sport season, and race | Mann, Douglas | Jersey | \$ 1,450 |
| Examining the Impact of a Fresh Food Pharmacy Group Intervention for Individuals with Type 2 | | Cumberland/Salem/Gloucester | |
| Group intervention for marviagas with Type 2 | Vaughn, Nicole | Health Wellness Alliance. Inc. | \$ 5,000 |

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College of Science & Mathematics Proposals Continued

Psychology (continued)

| Title | Principal Investigator | Sponsor | Requested Amount | |
|--|------------------------|---|---------------------|---------|
| Testing Construct and Predictive Validity of the Functional Assessment for Smoking Treatment Recommendations (FASTR) Questionnaire | Raiff, Bethany | National Institutes of Health | \$ | 423,409 |
| Discharge Summary Usability | Tremoulet, Patrice | New Jersey Health Foundation, Inc. | \$ | 30,080 |
| Randomized Controlled Trial of a Six-Month Mindfulness-Based Intervention for Type 2 Diabetes | Greeson, Jeffrey | Pennsylvania State University | \$ | 86,553 |
| Online Community Reinforcement and Family Training (CRAFT) for smoking treatment entry among high risk individuals with low socio economic status. | Raiff, Bethany | American Psychological Foundation | \$ | 20,000 |
| Human Factors research and consulting for ECRI Institute | Tremoulet, Patrice | ECRI Institute | \$ | 45,000 |
| Enabling adolescents with autism to learn to drive independently | Tremoulet, Patrice | Hotpathz | \$ | 18,588 |
| Mindfulomics: Pioneering the Field of Mindfulness, Stress & Health through the 'Omics' Sciences | Greeson, Jeffrey | The Institute for Integrative Health | \$ | 26,004 |
| Trauma-informed Approach to Improve Healthy Decision Making in Adolescent Girls | Joppa, Meredith | Drexel University | \$ | 38,063 |
| Child Restraint Usability in Vehicles with Novel Seating Configurations | Tremoulet, Patrice | The Children's Hospital of Philadelphia | \$ | 17,814 |
| Preventing Lung Cancer with a Social Support Smoking Cessation Intervention | Raiff, Bethany | Lung Cancer Research Foundation | \$ | 150,000 |

Nursing

| Title | Principal Investigator | Sponsor | Requested Amount |
|--|------------------------|--|---------------------|
| Side by Side: Improving Health Care Delivery through an Interprofessional Collaboration Disaster Education Using Virtual Reality | Nowak, Marian | The Josiah Macy Jr. Foundation | \$ 22,439 |
| Project Care:Increasing RNs in Primary Care by utilizing clinical practicum in primary care centers in underserved areas. | | Health Resources and Services Administration (HRSA) | \$ 212,508 |

Administration Awards & Proposals

Advancement

| Title | Principal Investigator | Sponsor | Awarded Amount | Indirect Awarded |
|----------------------------|------------------------|-----------------------------|----------------|------------------|
| Annual Giving Workshop and | | | | |
| Incorporation of Alumni | | Council for Advancement and | | |
| Engagement | Marshall, Amie | Support of Education | \$ 3,000 | \$ - |

VR Lab

| T EUV | | | | | |
|--|------------------------|---------------------------------|----------------|------------------|--|
| Title | Principal Investigator | Sponsor | Awarded Amount | Indirect Awarded | |
| Visualization of unmanned aircraft systems (UAS) within a CAVE Virtual Reality Environment : A | | | | | |
| Feasibility Project | Lecakes, George | Federal Aviation Administration | \$ 30,911 | \$ 8,970 | |

Academic Success Center

| Title | Principal Investigator | Sponsor | Awarded Amount | Indirect Awarded |
|---|------------------------|-------------------|----------------|------------------|
| College Compass Transition Supports @ Rowan University | Woodruff, John | Autism Speaks Inc | \$ 4,976 | \$ 452 |

Proposals

CHAMP/GEAR UP

| CHAMP/GEAR OF | | | |
|---|------------------------|-----------------------------|------------------|
| Title | Principal Investigator | Sponsor | Requested Amount |
| Summer 2017 Activity Grant - Professional | | | |
| Development | Wigfall, Winona | New Jersey Higher Education | \$ 2,990 |
| | | | |
| | | | |
| CHAMP/GEAR UP at Rowan University | Wigfall, Winona | American Honda Foundation | \$ 49,980 |

Educational Opportunity Fund

| Title | Principal Investigator | Sponsor | Requested Amoun | |
|-------|------------------------|----------------|-----------------|--------|
| STAR | Singleton, Dawn | ATT Foundation | \$ | 25,000 |

Student Affairs

| Title | Principal Investigator | Sponsor | Requested Amount | | | | | |
|--------------|------------------------|------------------|------------------|--|--|--|--|--|
| Archery Club | D'Elia, Andrew | USA Archery Fund | \$ 1,225 | | | | | |

Global Learning and Partnerships

| Title | Principal investigator | Sponsor | Request | ea Amount | | |
|---|------------------------|----------------------------|---------|-----------|--|--|
| Talent Network: Construction | | NJ Department of Labor and | | | | |
| Management | Sosa, Horacio | Workforce Development | \$ | 300,000 | | |
| Healthy Campus Initiatives | | | | | | |
| Title | Principal Investigator | Sponsor | Request | ed Amount | | |
| Rowan University - RU a Lifesaver Suicide | | American College Health | | | | |
| Prevention | Pearce, Allie | Foundation | \$ | 3,500 | | |

Academic Success Center

| Title | Principal Investigator | Sponsor | Requested Amour | it |
|---------------------------------------|------------------------|-------------------|-----------------|----|
| College Compass Transition Supports @ | | | 1 | |
| Rowan University | Woodruff, John | Autism Speaks Inc | \$ 4,98 | 0 |

VP Advancement

| Title | Principal Investigator | Sponsor | Requested Ar | mount |
|--|------------------------|-----------------------------|--------------|-------|
| Annual Giving Workshop and Incorporation | | Council for Advancement and | | |
| of Alumni Engagement | Marshall, Amie | Support of Education | \$ | 3,000 |

College of Communication & Creative Arts Awards & Proposals

| College of Communication and Creative Arts | | | | | | | | |
|--|-----|------|--------|---|-----|---------|------|-----------|
| | PRO | POSA | LS | | AWA | RDS | | |
| | # | Α | mount | # | Inc | directs | Tota | al Amount |
| Art Gallery | 2 | \$ | 15,000 | 4 | \$ | - | \$ | 35,000 |
| Communication Studies | 1 | \$ | 30,000 | - | \$ | - | \$ | - |
| Journalism | 1 | \$ | 35,000 | - | \$ | - | \$ | - |
| Writing Arts | 1 | \$ | 3,600 | 1 | \$ | - | \$ | 3,600 |
| Art Department | - | \$ | - | 1 | \$ | - | \$ | 20,000 |
| Total | 5 | \$ | 83,600 | 6 | \$ | - | \$ | 58,600 |

<u>Awards</u>

Art Department

| Title | Principal Investigator | Sponsor | Awarded | Amount | Indirect A | Awarded |
|--------------------------------|------------------------|-------------------------|---------|--------|------------|---------|
| Tobacco-free Campus Initiative | Skeffington, Thomas | American Cancer Society | \$ | 20,000 | \$ - | • |

Art Gallery

| Title | Principal Investigator | Sponsor | Awarded Amount | Indirect Awarded |
|-----------------------------------|------------------------|------------------------------|----------------|------------------|
| Navigating Elements | Salvante, Mary | NJ State Council on the Arts | \$ 14,000 | \$ - |
| Rowan Art Gallery General Support | Salvante, Mary | NJ State Council on the Arts | \$ 6,000 | \$ - |
| Heather Ujiie: Dystopian Garden | | | | |
| Paradise | Salvante, Mary | Coby Foundation, LTD | \$ 10,000 | \$ - |
| Heather Ujiee: Dystopian Garden | | | | |
| Paradise | Salvante, Mary | The Joseph Robert Foundation | \$ 5,000 | \$ - |

Writing Arts

| Title | Principal Investigator | Sponsor | Awarded Amount | Indirect Awarded |
|---|------------------------|-----------------------------|----------------|------------------|
| A Longitudinal Study of Ontological Learning with University | | | | |
| Administrators, Faculty, Staff, and Doctoral Students: Disrupting | | American Friends of the | | |
| Cartesian Subjectivity to Lead New | | Erhard-Jensen Ontological/ | | |
| Futures | Kopp, Andrew | Phenomenological Initiative | \$ 3,600 | \$ - |

Proposals

Art Gallery

| Title | Principal Investigator | Sponsor | Requested Amount |
|---|------------------------|---------------------------------|------------------|
| Heather Ujiie: Dystopian Garden Paradise | Salvante, Mary | Coby Foundation, LTD | \$ 10,000 |
| Heather Ujiie: Dystopian Garden Paradise | | The Joseph Robert Foundation | \$ 5,000 |

Communication Studies

| Title | Principal Investigator | Sponsor | Red | quested Amount |
|-------------------------------------|------------------------|-------------------|-----|----------------|
| Medical Education of Compassion and | | New Jersey Health | | 00.000 |
| Competence | Cypher, Joy | Foundation, Inc. | \$ | 30,000 |

| Title | Principal investigator | Sponsor | | Requested Amount |
|--|------------------------|--|----|------------------|
| The Climate Change Reporting Project Garyantes, Dianne Writing Arts | | Online News Association | \$ | 35,000 |
| Title | Principal Investigator | Sponsor | | Requested Amount |
| A Longitudinal Study of Ontological Learning with University Administrators, Faculty, Staff, and Doctoral Students: Disrupting Cartesian Subjectivity to Lead New Futures | Kopp, Andrew | American Friends of the Erhard-Jensen Ontological/ Phenomenological Initiative | \$ | 3,600 |

College of Science & Mathematics Proposals Continued

Physics and Astronomy

| Title | Principal Investigator | Sponsor | Requested Amount |
|--|------------------------|--|------------------|
| Chemical, Metabolic, and Physiological Analysis of the Effects from Vapor Emissions of Electronic Nicotine Delivery Systems | Whiting, Nicholas | U.S. Department of Defense | \$ 119,996 |
| Non-Invasive Targeted Molecular Imaging of PD-L1 Expression in Ovarian Cancer as an In Vivo Predictive Biomarker of Immunotherapy Response | Whiting, Nicholas | U.S. Department of Defense | \$ 335,923 |
| Development of multifunctional coatings for neurostimulation electrodes | Hettinger, Jeffrey | New Jersey Health Foundation, Inc. | \$ 35,000 |
| Collaborative Research: RUI: Understanding natural material chain intercalation in multiple dimensions | Hu, Xiao | National Science Foundation | \$ 132,758 |
| Flexible Air-Spun Protein Nanofiber Materials with Sensor Modulus for Air Filtering, Drug Delivery and Tissue Regeneration | Hu, Xiao | New Jersey Health Foundation, Inc. | \$ 32,000 |
| Collaborative Research: PIMS: Physics Inventory of Mathematical Sensemaking | Smith, Trevor | National Science Foundation | \$ 46,553 |
| Chemical Analysis and Physiological Response Monitoring of Exposure to Vapor Emissions from Electronic Nicotine Delivery Systems | Whiting, Nicholas | New Jersey Health Foundation, Inc. | \$ 35,000 |
| 2018 Summer Undergraduate Research Fellowship (SURF) at NIST - Gaithersburg | Hu, Xiao | National Institute of Standards and Technology | \$ 8,919 |
| Experimental and theoretical analysis of composition and ionization state effects on the dispersity and exchange processes of quaternary microemulsions. | Nucci, Nathaniel | American Chemical Society- Petroleum Research Fund (ACS PRF) | \$ 70,000 |
| Quantifying Understanding Hidden in Wrong Answers | Smith, Trevor | National Science Foundation (NSF) | \$ 166,454 |

Psychology

| rsychology | | | |
|--|------------------------|---|------------------|
| Title | Principal Investigator | Sponsor | Requested Amount |
| Rowan University CEMRRAT2 TF | Frierson, Georita | American Psychological Association | \$ 9,980 |
| Optimizing a self-directed mobile mindfulness intervention for improving cardiorespiratory failure survivors' psychological distress | Greeson, Jeffrey | Duke University | \$ 86,324 |
| The development and validation of a novel paradigm for assessing sexual assault risk perception in MSM | Angelone, D.J. | National Institutes of Health | \$ 466,866 |
| Dating Violence and Sexual Risk in Young Mothers' Relationships: Directions for Prevention | Joppa, Meredith | New Jersey Health Foundation, Inc. | \$ 33,240 |
| Supporting Prevention in Relationships for Teams (SPoRT): A data-driven prevention intervention to promote healthy relationships for student-athletes | Joppa, Meredith | National Collegiate Athletic Association | \$ 19,948 |
| Training Non-Smoking Significant Others to Provide Social Support in the Context of Internet- based Contingency Management to Prevent Smoking Relapse | Raiff, Bethany | National Institutes of Health | \$ 150.000 |

College of Science & Mathematics Proposals Continued

Computer Science

| Title | Principal Investigator | Sponsor | Requested Amou |
|---|------------------------|------------------------------------|----------------|
| CAREER: Machine Learning Framework for Computational Creativity | Ho, Shen-Shyang | National Science Foundation | \$ 439,12 |
| The Camden Dream Project: Boosting Educational Achievement in Technology and Engineering | Kay, Jennifer | National Science Foundation | \$ 1,140,16 |
| Perka First Data Rowan Computer Science Laboratory - Phase 4 | Lobo, Andrea | Perka, Inc. | \$ 190,67 |
| Security and Privacy of Wearable Medical Devices | Heydari, Vahid | New Jersey Health Foundation, Inc. | \$ 35,00 |
| Rowan University's GenCyber Summer Camp SaTC: CORE: Small: Anti-Censorship Framework | Heydari, Vahid | National Security Agency | \$ 80,67 |
| Using Mobile IPv6-based Moving Target Defense for Web Servers | Heydari, Vahid | National Science Foundation | \$ 425,13 |
| SaTC: CORE: Small: Moving Target Defense for Internet-Controlled Systems | Heydari, Vahid | National Science Foundation | \$ 378,56 |
| ATD: New Approaches for Anomaly Detection in Spatiotemporal Data | Ho, Shen-Shyang | National Science Foundation (NSF) | \$ 405,51 |
| Immersive Visual Analysis for large scale and multi-dimensional Data | Sun, Bo | Brookhaven National Laboratory | \$ 15,00 |
| Visualization and mining of metabolomics data | Hnatyshin, Vasil | Bristol-Myers Squibb (BMS) | \$ 60,00 |

Mathematics

| Title | Principal Investigator | Sponsor | Requested Amount |
|--|------------------------------|---|------------------|
| A Unified Bayesian Hierarchical Framework for Pathway Analysis in Genome-Wide Association Studies | Papachristou, Charalampos | University of Texas at Dallas | \$ 138,231 |
| REU Site: Data-Driven Predictive Modeling using Differential Equations and Machine Learning | Wang, Min | National Science Foundation | \$ 287,872 |
| Administration and Execution of the ASRC Federal Mission Solutions/Rowan University Collaboration | Breitzman, Tony | ASRC Federal | \$ 481,821 |
| Bridging Undergraduate Student Research in Mathematics Between Four-Year and Two-Year Institutions | Nguyen, Hieu | Center for Undergraduate Research in Mathematics | \$ 18,900 |
| Modeling nosocomial MRSA infections in intensive care units with fractional differential equations | Wang, Min | New Jersey Health Foundation, Inc. | \$ 28,075 |
| Degenerate Elliptic Problems with Variable Exponents | Wang, Min | University of Tennessee at Chattanooga | \$ 72,225 |
| Genetics of Preeclampsia | Bendjilali, Nasrine | New Jersey Health Foundation, Inc. | \$ 34,961 |
| A Unified Bayesian Hierarchical Framework for Pathway Analysis in Genome-Wide Association Studies | Papachristou, Charalampos | University of Texas at Dallas | \$ 111,281 |

School of Earth and Environment Awards & Proposals

| School of Earth and Environment | | | | | |
|---------------------------------|------|--------------|----|------------|---------------------|
| PROPOSALS AWARDS | | | | | |
| | # | Amount | # | Indirects | Total Amount |
| Dean's Office | 2 | \$ 66,000 | - | \$ - | \$ - |
| Geology | 1 | \$ - | 3 | \$ 197,746 | \$ 573,029 |
| Geography, Planning and | | | | | |
| Sustainability | 10 | \$ 1,036,985 | 10 | \$ 110,293 | \$ 1,088,142 |
| Tota | I 13 | \$ 1,102,985 | 13 | \$ 308,039 | \$ 1,661,171 |

Awards

Geography, Planning & Sustainability

| Sustainability | | | | |
|---|------------------------|---|----------------|------------------|
| Title | Principal Investigator | Sponsor | Awarded Amount | Indirect Awarded |
| The New Jersey Municipal Asset Profiler Operations Support FY18 | Hasse, John | F. M. Kirby Foundation | \$ 20,000 | \$ - |
| National Guard Facilities GIS Internship Program | Hasse, John | NJ Dept. of Military and Veteran Affairs | \$ 164,901 | \$ 34,027 |
| Garbage in the Garden (State): Ecological Identity & Solid Waste Governance in New Jersey | Howell, Jordan | National Science Foundation | \$ 57,344 | \$ 18,948 |
| EPA STAR Equitable Distribution of Green Stormwater Infrastructure (GSI) Projects in Philadelphia | Meenar, Mahbubur | Temple University (Prime: U.S. Environmental Protection Agency) | \$ 28,420 | \$ 5,865 |
| Brownfields Area-Wide Plan for Philadelphia's Lower North Delaware Industrial District | Meenar, Mahbubur | US Environmental Protection Agency | \$ 174,699 | \$ - |
| Planning for Water Quality Phase 2: developing the NJ Buildout Modeler | Hasse, John | NJ Department of Environmental Protection | \$ 479,601 | \$ 42,983 |
| The NJ Conservation Blueprint Phase 2-b | Hasse, John | New Jersey Conservation Foundation (Prime: William Penn Foundation) | \$ 40,000 | \$ 3,636 |
| Watershed Storytelling: Experiential Tools for Connecting People, Place and Water | Jennifer Kitson | New Jersey Council for the Humanities | \$ 5,000 | \$ - |
| New Jersey Municipal Asset Profiler (2018) | Hasse, John | The Geraldine R. Dodge Foundation | \$ 65,000 | \$ - |
| Geo-spatial Planning and Design for Camden County's Green Infrastructure | Meenar, Mahbubur | Camden County Municipal Utilities Authority | \$ 53,177 | \$ 4,834 |

Geology

| Title | Principal Investigator | Sponsor | Awarded Amount | Indirect Awarded |
|--|------------------------|---|----------------|------------------|
| Antarctic Surface Hydrology and Future Ice-Shelf Stability | | Columbia University (Prime: National Science Foundation) | \$ 2,729 | \$ 910 |
| NSF Collaborative Research: Water on the Antarctic Ice Sheet | | National Science Foundation | \$ 97,922 | \$ 32,640 |
| OSIRIS-REx Asteroid Sample Return Mission | Connolly, Harold | University of Arizona (Prime: NASA) | \$ 472,378 | \$ 164,196 |

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School of Earth and Environment Proposals

Dean's Office

| Title | Principal Investigator | Sponsor | Requested Amount |
|--------------------------|------------------------|--------------------------|------------------|
| 2017 STEAM Academy | Fischer, Danielle | TD Charitable Foundation | \$ 25,000 |
| AOEP 2018-2019 UNITE RFP | Fischer, Danielle | Department of Army | \$ 41,000 |

Geography, Planning & Sustainability

| Title | Principal Investigator | Sponsor | Requested Amount |
|---|------------------------|--|------------------|
| Examining spatial inequality around food distribution and transportation in urban and rural communities | Meenar, Mahbubur | Rensselaer Polytechnic Institute | \$ 250,000 |
| National Guard Facilities GIS Internship Program, Year 3 | Hasse, John | NJ Dept. of Military and Veteran Affairs | \$ 164,901 |
| Fair Share Housing Center NJ The NJ Conservation Blueprint Phase 2-b and Analysis 2017 | Hasse, John | New Jersey Conservation Foundation | \$ 40,000 |
| New Jersey Municipal Asset Profiler (2018) | Hasse, John | The Geraldine R. Dodge Foundation | \$ 65,000 |
| Fair Share Housing Center NJ Land Analysis 2017 | Hasse, John | Fair Share Housing Center | \$ 5,000 |
| Watershed Storytelling: Experiential Tools for Connecting People, Place and Water | Kitson, Jennifer | New Jersey Council for the Humanities | \$ 5,000 |
| Community Food Security in Underserved Areas: Analyzing Supply and Demand Side of Food Systems | Meenar, Mahbubur | Rensselaer Polytechnic Institute | \$ 150,000 |
| Reconstructing Holocene Atlantic Equatorial Variability: Testing Linkages Between Tropical Variability Modes and the Green Sahara | Rustic, Gerald | National Science Foundation | \$ 178,910 |
| Geo-spatial Planning and Design for Camden County's Green Infrastructure | Meenar, Mahbubur | Camden County Municipal Utilities Authority | \$ 53,175 |
| NJ MAP Operational Support 2018-2019 | Hasse, John | F. M. Kirby Foundation | \$ 25,000 |
| Design/build a climate smart Children's STEAM Garden: Intersection of stormwater management, art, technology, and recreational amenities in public spaces | Meenar, Mahbubur | Woodard & Curran Foundation | \$ 99,999 |

College of Science & Mathematics Proposals Continued

| Chemistry and Biochemistry | | | |
|--|------------------------|---|------------------|
| Title | Principal Investigator | Sponsor | Requested Amount |
| Broadening Mechanisms in Size-Based Separations for Polymer Characterization using Superficially Porous Particles | Grinias, James | American Chemical Society- Petroleum Research Fund | \$ 55,000 |
| Synthesis of Pharmaceutical Compounds | Jonnalagadda, Subash | Avante Pharmaceuticals | \$ 10,050 |
| Research and Development of Topical and Intravenous Formulations | Jonnalagadda, Subash | Teligent, Inc. | \$ 25,000 |
| Novel trace amine-associated receptor 1 ligands for drug addiction and schizophrenia | Keck, Thomas | PhRMAFoundation | \$ 100,000 |
| Metallooxaziridines for the Synthesis of Nitrogen- Containing Three-Membered Heterocycles | Moura-Letts, Gustavo | National Science Foundation | \$ 668,046 |
| Indole Alkaloids as Potent Analgesics | Moura-Letts, Gustavo | Syrsa Corporation | \$ 98,393 |
| RUI: Rearrangement Reactions of Divinyldiaziridines for the Synthesis of Seven-Membered Ring N,N-Containing Heterocycles | Moura-Letts, Gustavo | National Science Foundation | \$ 297,403 |
| Identifying Neonatal Malnourishment by Tear Fluid Analysis using Droplet Microfluidics | Grinias, James | New Jersey Health Foundation, Inc. | \$ 35,000 |
| Portable Liquid Chromatograph for Point-of-Care Monitoring of Illicit Substances | Grinias, James | Tranxend, LLC | \$ 76,642 |
| Assessing the anti-neuroinflammatory effects of tetrahydrocannabivarin (THCV) | Keck, Thomas | New Jersey Health Foundation, Inc. | \$ 35,000 |
| Mycobacterium vaccae immunization for drug addiction, relapse and withdrawal | Keck, Thomas | National Institutes of Health | \$ 397,338 |
| Answers to the Opioid Epidemic: Development of Side Effect and Addictive Free Novel Alkaloid Analgesics | Moura-Letts, Gustavo | New Jersey Health Foundation, Inc. | \$ 35,000 |
| Hybrid Transition Metal electrocatalystic Materials for Hydrogen Evolution Reaction | Mugweru, Amos | National Science Foundation | \$ 291,141 |
| RUI: Combined experimental and computational study on biomolecular ionic liquids for protein stabilization | Vaden, Timothy | National Science Foundation | \$ 294,581 |
| PUI: Preparation and Modification of Carbide-Derived Carbon at Ambient and Chlorine-Free Conditions: Versatile and Controlled Porous Carbon Material for Supercapacitors and Catalysts | Yu, Lei | National Science Foundation | \$ 250,191 |
| A Low-Cost, Open-Source Fluorescence Detector System for Bioanalytical Applications | Grinias, James | Society of Analytical Chemists of Pittsburgh | \$ 10,000 |
| Use of New HILIC Phases for the Analysis of Drugs of Abuse | Grinias, James | Agilent Technologies | \$ 20,000 |
| Studies on the Properties of Substituted Diazirines as Bioadhesives | | Nanyang Technological University | \$ 20,000 |
| Acquisition of a 400 MHz Bruker Avance III HD NMR Spectrometer for the Transformative Advancement of Undergraduate Research | · | National Science Foundation | \$ 360,806 |
| Reactions of Vinyl and Divinyldiaziridines for the Synthesis of Heterocyclic Pharmacophores | Moura-Letts, Gustavo | National Institutes of Health | \$ 449,024 |
| Azulenylalanine for mechanistic studies and development of antimicrobial peptides and protease-resistant antimicrobial hydrogels | Caputo, Gregory | Syracuse University | \$ 139,224 |

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College of Science & Mathematics Proposals

Biological Sciences

| Title | Principal Investigator | Sponsor | Req | uested Amount |
|---|------------------------|---|-----|---------------|
| Microbial regulation of individual and social behaviors in honey bees | Vojvodic, Svjetlana | National Science Foundation | \$ | 639,656 |
| Bacterial Biosorption of Soluble Lead | Hecht, Gregory | National Science Foundation | \$ | 322,381 |
| Gut microbial regulation of individual and social behaviors in honey bees | Vojvodic, Svjetlana | New Jersey Health Foundation, Inc. | \$ | 34,940 |
| Altered gut microbiome influencing learning and memory in honey bee | Vojvodic, Svjetlana | North American Pollination Protection Campaign | \$ | 10,000 |

Molecular & Cellular Biosciences

| Title | Principal Investigator | Sponsor | Requested Amount |
|--|------------------------|------------------------------------|------------------|
| Title | Fincipal investigator | Sportsor | Requested Amount |
| Revealing the epigenome of difficult to interrogate cell populations using the chemotherapeutic agent Bleomycin | Carone, Benjamin | New Jersey Health Foundation, Inc. | \$ 34,500 |
| The Development of Radio- Laser Photothermal Therapy (R-LPTT) as a Novel Platform Technology for Treating Tumors | Dobbins, Tabbetha | New Jersey Health Foundation, Inc. | \$ 35,000 |
| Characterizing a new hypoxic signaling pathway | Hickman, Mark | New Jersey Health Foundation, Inc. | \$ 35,000 |
| Development of small inhibitors of herpes simplex virus infection. | Krummenacher, Claude | New Jersey Health Foundation, Inc. | \$ 35,000 |
| Optimization and characterization of a novel matrix for delivery of small molecule, carbohydrate, and protein-based therapeutics. | Nucci, Nathaniel | New Jersey Health Foundation, Inc. | \$ 35,000 |
| Elucidating the impact of the Npc1nmf164 mutation in the postnatal cerebellar development of a mouse model of Niemann-Pick Type C disease. | Soto, Ileana | National Institutes of Health | \$ 419,088 |
| Investigating the capacity of induced and targeted H3K9 methylation to elicit robust epigenetic programming | Carone, Benjamin | National Institutes of Health | \$ 449,262 |
| Combining Checkpoint Blockade Immunotherapy with Targeted Hyperthermia to Improve the Treatment of Resistant Lung Cancer | Whiting, Nicholas | Lung Cancer Research Foundation | \$ 149,981 |

College of Education Awards & Proposals

| College of Education | | | | | |
|---|-----|--------------|----|---------------|--------------|
| | PRO | POSALS | | AWARDS | |
| | # | Amount | # | Indirects | Total Amount |
| Interdisciplinary/Inclusive Education | 4 | \$ 1,292,864 | 2 | \$ 1,475 | \$ 16,225 |
| STEAM Education | 1 | \$ 15,600 | - | \$ - | \$ - |
| Educational Services and Leadership | 3 | \$ 877,730 | 3 | \$ 8,824 | \$ 109,526 |
| Center for Access, Success, and Equity | 10 | \$ 7,943,041 | 7 | \$139,589 | \$ 2,312,594 |
| Language, Literacy, & Sociocultural Education | 3 | \$ 157,890 | 1 | \$ - | \$ 74,089 |
| Total | 21 | \$10,287,125 | 13 | \$149,888 | \$ 2,512,434 |

Awards

Educational Services and Leadership

| Educational Services and Leadership | | | | | | |
|--|------------------------|---|----------------|------------------|--|--|
| Title | Principal Investigator | Sponsor | Awarded Amount | Indirect Awarded | | |
| National Association of School Psychologists Standards Revision - Graduate Assistant | | National Association of School Psychologists | \$ 11,670 | \$ - | | |
| Forman S Acton: Evaluating the Effectiveness of Initiatives | | Forman S. Acton Educational Foundation | \$ 24,489 | \$ 2,154 | | |
| Forman S Acton: Evaluating the Effectiveness of Initiatives | | Forman S. Acton Educational Foundation | \$ 73,367 | \$ 6,670 | | |

Center for Access, Success, and Equity

| Title | Principal Investigator | Sponsor | Awarded Amount | Indirect Awarded |
|--|------------------------|--|----------------|------------------|
| The Beginning Teacher Project: Building Capacity and Professional Learning | Vernon-Dotson, Lisa | NJ Department of Education | \$ 113,931 | \$ 8,440 |
| The Beginning Teacher Project: Building Capacity and Professional Learning | Vernon-Dotson, Lisa | NJ Department of Education | \$ 21,118 | \$ 1,971 |
| Early Childhood Leadership Fellowship Program | Isik-Ercan, Zeynep | The Nicholson Foundation | \$ 24,962 | \$ 2,269 |
| Southern Learning Resource Center at Rowan University | Vernon-Dotson, Lisa | NJ Department of Education (NJDE) | \$ 1,137,485 | \$ 90,999 |
| 2018 Early Intervention Program | Dihoff, Roberta | NJ Department of Health | \$ 621,078 | \$ - |
| Early Childhood Leadership Institute - Grow NJ Kids | Isik-Ercan, Zeynep | NJ Department of Human Services | \$ 175,120 | \$ 15,920 |
| Early Childhood Leadership Institute Partnership on NJ MD Home Visiting Innovation Project | Isik-Ercan, Zeynep | New Jersey Department of Children and Families (NJDCF) | \$ 218,900 | \$ 19,990 |

Interdisciplinary and Inclusive Education

| Title | Principal Investigator | Sponsor | Awarded Amount | | Indirect Awarded | |
|--|------------------------|------------------------------------|----------------|-------|------------------|-----|
| Early Childhood Leadership Institute - Grow NJ Kids | | NJ Department of Human Services | \$ | 9,295 | \$ | 845 |
| Early Childhood Leadership Institute - Grow NJ Kids | | NJ Department of Human Services | \$ | 6,930 | \$ | 630 |

Language, Literacy, & Sociocultural Education

| Title | Principal Investigator | Sponsor | Awarded | Amount | Indirect Awarded | |
|---|------------------------|----------------------------|---------|--------|------------------|---|
| Language, Literacy, and Cultural Practices in Oaxaca, Mexico: A Rowan Summer Experience for K-12 Educators | | US Department of Education | \$ | 74,089 | \$ | _ |

College of Education Proposals

Educational Services and Leadership

| Title | Principal Investigator | Sponsor | Requested Amoun | | |
|---|------------------------|--|-----------------|--|--|
| NASP Graduate Assistant Position 2017-2018 | Williams, Barbara | National Association of School Psychologists | \$ 11,670 | | |
| Forman S. Acton Educational Foundation Multi- Year Evaluation Grant | Kerrigan, Monica | Forman S. Acton Educational Foundation | \$ 859,185 | | |
| Resident Assistants and Student Suicide: An investigation into RA experiences | Walpole, MaryBeth | Association of College and University Housing Officers - International (ACUHO-I) | \$ 6,875 | | |

Language, Literacy, & Sociocultural Education

| Title | Principal Investigator | Sponsor | Requested Amount |
|--|------------------------|--------------------|------------------|
| Am I Allowed to Be Bilingual Here?: Languages and Literacies in a Bilingual After-School Program | Abraham, Stephanie | Spencer Foundation | \$ 50,000 |
| Civic Engagement in the Era of Urban Gentrification: Reimagining Community Through A Youth-Led Participatory Action Research and Community Capitals Asset Mapping Project in West Philadelphia | Sung, Kenzo | Drexel University | \$ 37,890 |
| Imperial Eyes on the Prize: British and American Educational Reforms, National Discourses, and Legacies of Empire in the Postwar Era | Sung, Kenzo | Spencer Foundation | \$ 70,000 |

STEAM Education

| Title | Principal Investigator | Sponsor | Requested Amount |
|--|------------------------|--------------------|------------------|
| A study of middle school students' online learning experiences | Kuo, Yu-Chun | Spencer Foundation | \$ 15,600 |

Interdisciplinary/Inclusive Education

| Title | Principal Investigator | Sponsor | Requested Amount |
|---|------------------------|---|------------------|
| Predictors of Success for College Students with ASD: A Multi-University Project | | Organization for Autism Research (OAR) | \$ 29,987 |
| Developing and Implementing an Emotion Coaching Intervention for Teachers in Early Intervention and Inclusive Early Childhood Settings | | Institute of Education Sciences (IES) | \$ 1,221,616 |
| Keepers of Memory: The Holocaust and Transgenerational Identity Formation | Rich, Jennifer | Hadassah-Brandeis Institute | \$ 2,000 |
| Critical Analysis of the New Jersey Holocaust Education Mandate | Rich, Jennifer | Spencer Foundation | \$ 39,261 |

College of Science & Mathematics Awards Continued

Physics and Astronomy

| Title | Principal Investigator | Sponsor | Awarded Amount | Indirect Awarded |
|---|------------------------|---|----------------|------------------|
| Understanding Synergistic Effects of Nano-Confinement and Catalysis on Methane Gas and Syn-Gas Synchrotron X-ray and Neutron Characterization | Dobbins, Tabbetha | American Chemical Society- Petroleum Research Fund | \$ 70,000 | \$ - |
| Johnson Matthey Materials Characterization | Hettinger, Jeffrey | Johnson Matthey | \$ 28,945 | \$ 9,648 |
| Development of multifunctional coatings for neurostimulation electrodes | Hettinger, Jeffrey | New Jersey Health Foundation, Inc. | \$ 35,000 | \$ - |
| Chemical Analysis and Physiological Response Monitoring of Exposure to Vapor Emissions from Electronic Nicotine Delivery Systems | Whiting, Nicholas | New Jersey Health Foundation, Inc. | \$ 35,000 | \$ - |
| 2018 Summer Undergraduate Research Fellowship (SURF) at NIST - Gaithersburg | Hu, Xiao | National Institute of Standards and Technology | \$ 8,919 | \$ - |
| RUI: Collaborative Research: Understanding the protein- polysaccharide interactions of natural composite materials in one and two dimensions | Hu, Xiao | National Science Foundation | \$ 43,704 | \$ 13,568 |
| New Jersey Space Grant Consortium Training Grant - Physics | Magee-Sauer, Karen | Rutgers, The State University of New Jersey (Prime: NASA) | \$ 15,000 | \$ - |
| Johnson Matthey Materials Science Graduate Assistantship | Hettinger, Jeffrey | Johnson Matthey | \$ 33,200 | \$ 10,400 |

Mathematics

| Title | Principal Investigator | Sponsor | Awarded Amount | Indirect Awarded |
|---|------------------------|-------------------------------|----------------|------------------|
| Proposal for Research Collaboration Rowan University - ASRC Federal/Mission | | | | |
| Solutions | Tony Breitzman | Mission Solutions Engineering | \$ 155,884 | \$ 51,961 |
| Proposal for Research Collaboration Rowan University - ASRC Federal/Mission Solutions | Tony Breitzman | Mission Solutions Engineering | \$ 80,805 | \$ 26,935 |
| Proposal for Research Collabora- tion Rowan University - ASRC Federal/Mission Solutions | Tony Breitzman | Mission Solutions Engineering | \$ 99,906 | \$ 33,302 |

College of Science & Mathematics Awards Continued

Chemistry & Biochemistry

| Title | Principal Investigator | Sponsor | Awa | arded Amount | Indi | rect Awarded |
|--|------------------------|--|-----|--------------|------|--------------|
| Acquisition of UHPLC Instrumentation with SFC and Semi-Preparative Capabilities | Grinias, James | Shimadzu | \$ | 78,500 | \$ | - |
| Synthesis of Pharmaceutical compounds | Jonnalagadda, Subash | Avante Pharmaceuticals | \$ | 10,000 | \$ | 2,000 |
| Indole Alkaloids as Potent Analgesics | Moura-Letts, Gustavo | Syrsa Corporation | \$ | 98,400 | \$ | 22,395 |
| Metallooxaziridines for the Synthesis of Nitrogen-Containing Three-Membered Heterocycles | Moura-Letts, Gustavo | National Science Foundation | \$ | 315,000 | \$ | 105,001 |
| MRI: Acquisition of a 400 MHz Nuclear Magnetic Resonance Spectrometer for the Transformative Advancement of Undergraduate Research | Moura-Letts, Gustavo | National Science Foundation | \$ | 299,000 | \$ | _ |
| Broadening Mechanisms in Size-Based Separations for Polymer Characterization using Superficially Porous Particles | Grinias, James | American Chemical Society- Petroleum Research Fund | \$ | 55,000 | \$ | - |
| Signaling mechanisms in VIBRIO Cholearae Parallel quorum sensing pathways | Perez, Lark | Tufts University (Prime: National Institutes of Health) | \$ | 28,707 | \$ | 9,569 |

Computer Science

| Title | Principal Investigator | Sponsor | Awarded Amount | Indirect Awarded |
|--|------------------------|--------------------------------|----------------|------------------|
| Spectral alignment and outlier detection for LC-MS data | Hnatyshin, Vasil | Bristol-Myers Squibb | \$ 40,000 | \$ 13,333 |
| Perka First Data Rowan Computer Science Laboratory - Phase 4 | Lobo, Andrea | Perka, Inc. | \$ 190,672 | \$ 63,557 |
| Immersive Visual Analysis for large scale and multi-dimensional Data | Sun, Bo | Brookhaven National Laboratory | \$ 15,000 | \$ 3,560 |

Psychology

| Title | Principal Investigator | Sponsor | Awar | Awarded Amount | | ect Awarded |
|---|------------------------|---|------|----------------|----|-------------|
| NHLBI Research Supplement to Promote Diversity in Health-Related Research for Gabrielle (Abby) Chin | | Kent State University (Prime: National Institutes of Health) | \$ | 61,995 | \$ | 15,205 |
| NHLBI Research Supplement to Promote Diversity in Health-Related Research for Gabrielle (Abby) Chin | | Kent State University (Prime: National Institutes of Health) | \$ | 61,995 | \$ | 15,205 |
| Mindfulomics: Pioneering the Field of Mindfulness, Stress & Health through the 'Omics' Sciences | Greeson, Jeffrey | The Institute for Integrative Health | \$ | 26,003 | \$ | 2,363 |

College of Education Proposals (continued)

Center for Access, Success and Equity

| Center for Access, Success and Equity | | | |
|---|------------------------|--|------------------|
| Title | Principal Investigator | Sponsor | Requested Amount |
| The Beginning Teacher Project (Year 3 of 3) | Vernon-Dotson, Lisa | NJ Department of Education | \$ 113,000 |
| Transformative Student Voice: Creating and Sustaining Equitable Educational Spaces. | Zion, Shelley | Spencer Foundation | \$ 49,980 |
| Early Childhood Leadership Fellowship Program | Isik-Ercan, Zeynep | The Nicholson Foundation | \$ 24,962 |
| BTLC Year Three Supplemental Funding (Final Year) | Vernon-Dotson, Lisa | NJ Department of Education | \$ 21,113 |
| Camden Promise Neighborhood | Zion, Shelley | US Department of Education | \$ 137,128 |
| Early Childhood Leadership Institute Partnership on NJ MD Home Visiting Innovation Project | Isik-Ercan, Zeynep | New Jersey Department of Children and Families (NJDCF) | \$ 314,600 |
| Early Childhood Leadership Training for PreK Expansion Program | Isik-Ercan, Zeynep | NJ Department of Education (NJDE) | \$ 77,220 |
| Southern Learning Resource Center at Rowan University | Vernon-Dotson, Lisa | NJ Department of Education (NJDE) | \$ 1,121,928 |
| The Community-Based Teacher Project: Recruiting, Preparing, Supporting, and Credentialing Diverse High Quality Teachers for Advancing STEM Access in High-Needs Communities | Zion, Shelley | Rutgers, The State University of New Jersey | \$ 5,683,235 |
| Critical Civic Inquiry: Student Centered Learning | Zion, Shelley | Jobs for the Future | \$ 399,875 |

Research Annual Report 2017-2018

Henry M. Rowan College of Engineering / **South Jersey Technology Park Awards & Proposals**

| Henry M. Rowan Co | llege of En | gineering and S | South Jerse | ey Technology | Park | |
|--|-------------|-----------------|-------------|---------------|--------------|--|
| | PRO | POSALS | | AWARDS | | |
| | # | Amount | # | Indirects | Total Amount | |
| Dean's Office | 3 | \$ 205,000 | 2 | \$ 20,041 | \$ 185,000 | |
| Biomedical Engineering | 18 | \$ 5,342,488 | 7 | \$ 255,752 | \$ 1,141,518 | |
| Chemical Engineering | 23 | \$11,738,832 | 5 | \$ 691,972 | \$ 3,008,273 | |
| Civil & Environmental Engi- neering | 31 | \$13,056,350 | 17 | \$ 726,287 | \$ 2,490,236 | |
| Electrical & Computer Engineering | 16 | \$ 7,001,692 | 4 | \$ 30,753 | \$ 164,757 | |
| ExEEd | 4 | \$ 995,764 | 2 | \$ 4,618 | \$ 309,062 | |
| Mechanical Engineering | 7 | \$ 1,006,004 | 4 | \$ 11,893 | \$ 216,280 | |
| Total | 102 | \$39,346,130 | 41 | \$ 1,741,316 | \$ 7,515,126 | |

Awards

| Deali 3 Office | | | | |
|--|------------------------|----------------------------|----------------|------------------|
| Title | Principal Investigator | Sponsor | Awarded Amount | Indirect Awarded |
| Design Multifunctional Protein-based Film Materials for Thermal Conductivity | | | | |
| Applications | | Sekisui Chemical Co., Ltd. | \$ 150,000 | \$ 17,448 |
| AWE and RISE in Engineering | Basantis, Melanie | PSEG Nuclear, LLC | \$ 35,000 | \$ 2,593 |

Biomedical Engineering

| Title | Principal Investigator | Sponsor | Awarded Amount | Indirect Awarded |
|--|------------------------|-------------------------------|----------------|------------------|
| REU: Probing mechanotransduction of disturbed flow in brain vasculature | Galie, Peter | National Science Foundation | \$ 298,921 | \$ 99,640 |
| Planaria as a high-throughput screening tool for assessing neurodevelopmental toxicity of BPA and BPA substitutes | Staehle, Mary | National Institutes of Health | \$ 216,000 | \$ 66,000 |
| Planaria as a high-throughput screening tool for assessing neurodevelopmental toxicity of BPA and BPA substitutes | Staehle, Mary | National Institutes of Health | \$ 178,500 | \$ 53,500 |
| REU Site: Biomedical Materials, Devices, Therapeutics, and Emerging Frontiers | Staehle, Mary | National Science Foundation | \$ 361,237 | \$ 30,112 |
| Establishing a mechanistic link between cerebral blood flow and the blood-brain barrier | Galie, Peter | American Heart Association | \$ 71,500 | \$ 6,500 |
| Post-drawing polymer nanofibers: Applying a fundamental fiber manufacturing process to nanofabrication | Beachley, Vincent | National Institutes of Health | \$ 15,360 | \$ - |

College of Science & Mathematics Awards & Proposals

| College | College of Science & Mathematics / School of Health Professions | | | | | | | |
|---------------------------------|---|--------------|----|------------|--------------|--|--|--|
| | PROI | POSALS | | AWARDS | | | | |
| | # | Amount | # | Indirects | Total Amount | | | |
| Dean's Office | - | \$ - | 1 | \$ - | \$ 60,000 | | | |
| Biological Sciences | 4 | \$ 1,006,977 | 2 | \$ 20,085 | \$ 332,149 | | | |
| Molecular & Cell Biosciences | 8 | \$ 1,192,831 | 2 | \$ - | \$ 70,000 | | | |
| Chemistry & Biochemistry | 21 | \$ 3,667,839 | 7 | \$ 138,965 | \$ 884,607 | | | |
| Computer Science | 10 | \$ 3,169,853 | 3 | \$ 80,450 | \$ 245,672 | | | |
| Mathematics | 8 | \$ 1,173,366 | 3 | \$ 112,198 | \$ 336,595 | | | |
| Nursing | 2 | \$ 234,947 | - | \$ - | \$ - | | | |
| Physics & Astronomy | 10 | \$ 982,603 | 8 | \$ 33,616 | \$ 269,768 | | | |
| Psychology | 16 | \$ 1,621,869 | 3 | \$ 32,773 | \$ 149,993 | | | |
| Health and Exercise Science | 10 | \$ 199,848 | - | \$ - | \$ - | | | |
| Total | 89 | \$13,281,669 | 29 | \$ 418,087 | \$ 2,348,784 | | | |

Awards

Dean's Office

| Title | Principal Investigator | Sponsor | Awarded Amount | Indirect Awarded |
|---|------------------------|--|----------------|---------------------|
| New Jersey Space Grant Consortium Training Grant - CSM | | Rutgers, The State University of New Jersey (Prime: NASA) | \$ 60,000 | \$ - |

Biological Sciences

| Diological ociences | | | | | |
|--|------------------------|---|-------------------|---------------------|--|
| Title | Principal Investigator | Sponsor | Awarded Amount | Indirect Awarded | |
| Bridges to Baccalaureate: Cumberland County College Bridge to | | National Institutes of Health | ¢ 202.200 | ф с 7 04 | |
| Rowan | Krufka, Alison | National Institutes of Health | \$ 292,266 | \$ 6,791 | |
| Preclinical analysis of MAD28 in inflammatory breast cancer | | University of California - San Diego (Prime: California Breast Cancer Research Program) | \$ 39,883 | \$ 13,294 | |

Molecular & Cellular Biosciences

| Title | Principal Investigator | Sponsor | Awarded Amount | Indirect Awarded |
|--|------------------------|------------------------------------|-------------------|---------------------|
| Development of small inhibitors of herpes simplex virus infection. | Claude Krummenacher | New Jersey Health Foundation, Inc. | \$ 35,000 | \$ - |
| Optimization and characterization of a novel matrix for delivery of small molecule, carbohydrate, and proteinbased therapeutics. | | New Jersey Health Foundation, Inc. | \$ 35,000 | \$ - |

College of Performing Arts Awards & Proposals

| College of Performing Arts | | | | | | | | |
|----------------------------|-----|------|--------|---|----|----------|------|----------|
| | PRO | POSA | LS | | AW | ARDS | | |
| | # | A | mount | # | lr | ndirects | Tota | I Amount |
| Dean's Office | 2 | \$ | 44,915 | 1 | \$ | - | \$ | 15,000 |
| Music | 1 | \$ | 37,518 | 1 | \$ | 1,852 | \$ | 25,000 |
| Tota | 3 | \$ | 82,433 | 2 | \$ | 1,852 | \$ | 40,000 |

<u>Awards</u>

Dean's Office

| 20011 0 011100 | | | | |
|--|------------------------|---------------------------------|----------------|------------------|
| Title | Principal Investigator | Sponsor | Awarded Amount | Indirect Awarded |
| Christiane Matallo Residency and Performance - House of Murals | Sanders, Gloria | NJ State Council on the Arts | \$ 15,000 | \$ - |

Music

| Title | Principal Investigator | Sponsor | Awarded Amount | Indirect Awarded |
|---|------------------------|---------------------|----------------|------------------|
| Les Paul Foundation Grant for Rowan Music Industry Summer Camp | Gendreau, Mathieu | Les Paul Foundation | \$ 25,000 | \$ 1,852 |

Proposals

Dean's Office

| Title | Principal Investigator | Sponsor | Requested Amount |
|--|------------------------|--------------------------------------|------------------|
| Movement: A Celebration of Women in Choreography | | NJ State Council on the Arts (NJSCA) | \$ 41,690 |
| | | | |
| Mid Atlantic Touring Grant, The Crossing | Stewart, Melanie | Mid Atlantic Arts Foundation | \$ 3,225 |

Music

| Title | Principal Investigator | Sponsor | Requested Amount |
|---|------------------------|---------------------|------------------|
| Les Paul Foundation Grant for Rowan Music Industry Summer Camp | Gendreau, Mathieu | Les Paul Foundation | \$ 37,518 |

Engineering / SJTP Awards (continued)

Chemical Engineering

| Title | Principal Investigator | Sponsor | Awarded Amount | Indirect Awarded |
|--|------------------------|---|----------------|------------------|
| Synthesis and Characterization of Bio-based Resins for the Development of Sustainable Polymers and Composites for DoD applications | Stanzione, Joseph | Department of Army | \$ 1,949,887 | \$ 454,989 |
| Engineered Materials and Materials Design of Engineered Materials (EMMDEM) - Tactical Shelters, NU Year 2 | Stanzione, Joseph | Northeastern University (Prime: US Department of Defense) | \$ 186,000 | \$ 36,301 |
| High-Performance Polymers from Bio-based Feedstocks | Stanzione, Joseph | Drexel University (Prime: US Department of Defense) | \$ 475,662 | \$ 78,075 |
| CAREER: Nanostructured Particle Stabilized Bicontinuous Emulsions: Structure-Formation Principles, Structure Function Relationships and Biphasic Transport Processes | Martin Haase | National Science Foundation | \$ 393,924 | \$ 121,674 |
| Cardolite Corporation Fee-for- Service Account | Stanzione, Joseph | Cardolite Corporation | \$ 2,800 | \$ 933 |

Civil & Environmental Engineering

| Title | Principal Investigator | Sponsor | Awarded Amount | Indirect Awarded |
|--|------------------------|---|----------------|------------------|
| NJDOT Bridge Resource Program | Cleary, Douglas | Rutgers, The State University of New Jersey (Prime: NJ Dept. of Transportation) | | \$ 4,000 |
| 37 | Everett, Jess | NJ Dept. of Military and Veteran Affairs | \$ 54,525 | \$ 16,156 |
| NJARNG/Rowan University Energy/Building Information Mod- el (BIM) Intern Program | Everett, Jess | NJ Dept. of Military and Veteran Affairs | \$ 295,859 | \$ 98,620 |
| Facility Maintenance Internship Project | Everett, Jess | NJ Dept. of Military and Veteran Affairs | \$ 204,952 | \$ 55,294 |
| Development of Innovative Materials and Methods to Solve DoD Horizontal Infrastructure challenges in Cold Regions | Mehta, Yusuf | US Department of Defense | \$ 1,260,000 | \$ 372,134 |
| Integration of SHRP2 in Civil Engineering Curriculum | Mehta, Yusuf | US Department of Transportation | \$ 12,498 | \$ 1,136 |
| Development of Multi-Scale Non-Invasive In Situ and Remote Sensing Techniques for Proactive Waste Management: Demonstration and Training | Nazari, Rouzbeh | U.S. Dept. of Agriculture | \$ 170,000 | \$ 56,667 |
| Performance of DTIs with and without Bolt Face Washers | Riddell, William | Turnasure LLC | \$ 4,864 | \$ 1,621 |
| Evaluation of Quality of Road for Sussex County | Mehta, Yusuf | Advanced Infrastructure Design | \$ 3,000 |) \$ 1,000 |

Engineering / SJTP Awards (continued)

Civil & Environmental Engineering cont.

| Civil & Environmental Engineer | ing cont. | | | | | |
|--|------------------------|---|---------|---------|-------|-------------|
| Title | Principal Investigator | Sponsor | Awarded | Amount | Indir | ect Awarded |
| Evaluation of Precast Pavement Systems and Cast In-Place | Mehta, Yusuf | NJ Department of Transportation | \$ | 54,896 | \$ | 10,579 |
| Aerial Photography for Seawall Repair and Construction Project | Nazari, Rouzbeh | NJ Department of Environmental Protection | \$ | 72,575 | \$ | 24,192 |
| Evaluation of absorption of COVANTA aggregates | Mehta, Yusuf | COVANTA | \$ | 60,000 | \$ | 20,000 |
| Evaluation of Flow and Stability of Pellet Patch | Mehta, Yusuf | Energy Creates Energy | \$ | 10,000 | \$ | 3,333 |
| Traffic Impact Study | Mehta, Yusuf | NJ Department of Environmental Protection (NJDEP) | \$ | 30,000 | \$ | 10,000 |
| 2018 National Summer Transportation Institute (NSTI) Youth Program Statement of Work Announcement | Mehta, Yusuf | NJ Department of Transportation (NJDOT) | \$ | 55,720 | \$ | - |
| Intelligent Transportation Systems Resource Center (ITSRC) | Bhavsar, Parth | New Jersey Institute of Technology | \$ | 124,998 | \$ | 41,666 |
| Solar Hot Water Opportunities for NJDMAVA | Riddell, William | NJ Dept. of Military and Veteran Affairs | \$ | 28,569 | \$ | 8,963 |
| Evaluation of Impact of Rejuvenator on RAP Performance | Mehta, Yusuf | Cargill, Inc. | \$ | 2,780 | \$ | 926 |

Electrical & Computer Engineering

| Title | Principle Investigator | Sponsor | Awarded Amount | Indirect Awarded |
|--|------------------------|------------------------------------|----------------|------------------|
| MRIMATH: Coordinates and volumetrics for brain tumors | Bouaynaya, Nidhal | National Science Foundation | \$ 50,000 | \$ 5,000 |
| Noninvasive 3 Dimensional Fluorescence Microscopy for Skin Disease Detection | Ben Wu | New Jersey Health Foundation, Inc. | \$ 35,000 | \$ - |
| Visualization of unmanned aircraft systems (UAS) within a CAVE Virtual Reality Environment : A Feasibility Project | Bouaynaya, Nidhal | Federal Aviation Administration | \$ 34.757 | \$ 11,586 |
| Augmented Reality Use Case Investigation | Mandayam, Shreekanth | Naval Sea Systems Command (NAVSEA) | \$ 45,000 | \$ 14,167 |

College of Humanities & Social Sciences Proposals

| Douil 5 Ollio | Dea | n's | Off | ice |
|---------------|-----|-----|-----|-----|
|---------------|-----|-----|-----|-----|

| Title | Principal Investigator | Sponsor | Requested Amount |
|---|------------------------|---------------------------------------|------------------|
| Time is money: Assessing hospital cost, physicians' time, and patient satisfaction in the use of medical interpreters | Poteau, Christine | National Endowment for the Humanities | \$ 182,349 |
| Protecting Immigrant Women and their Children from Violence and Family Separation | Ammar, Nawal | American University | \$ 78,720 |
| A Multi-sector Partnership to Investigate and Develop Policy and Practice Models to dismantle "Rape culture" in Universities | Ammar, Nawal | McGill University | \$ 24.341 |
| Offiversides | Animai, Nawai | INICOM OTHER STATE | Ψ 24,541 |
| Rowan FLAS Program A Multi-sector Partnership to Investigate and Develop Policy and Practice Models to dismantle "Rape culture" in | Blake, Corinne | US Department of Education | \$ 922,500 |
| Universities. | Ammar, Nawal | McGill University | \$ 24,341 |

History

| Title | Principal Investigator | Sponsor | Requested Amount |
|---|------------------------|---|------------------|
| The Megan Giordano Fellow in Public History | Carrigan, Bill | Gloucester County Parks Recreation | \$ 61,602 |
| Mapping the Cold War at RCA, South Jersey | Aksel, Keith | National Endowment for the Humanities (NEH) | \$ 24,848 |
| Foreign-Born Victims of Mob Violence and the Decline of Lynching in the United States | Carrigan, William | National Science Foundation (NSF) | \$ 128,622 |

Political Science & Economics

| Title | Principal Investigator | Sponsor | Requested Amount |
|------------------------------|------------------------|------------------------------------|------------------|
| | | Woodrow Wilson National Fellowship | |
| Pluta Course Hero Fellowship | Pluta, Anne | Foundation | \$ 40,000 |

Law and Justice

| Title | Principal Investigator | Sponsor | Requested Amount |
|---|------------------------|--|------------------|
| Understanding the Needs and Experiences of Families and Friends of | | | |
| Homicide Victims | Mastrocinque, Jeanna | Justice Research and Statistic Association | \$ 14,653 |
| 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 | Capellan, Joel | National Institute of Justice (NIJ) | \$ 248,079 |

Holllybush Institute

| | Title | Principal Investigator | Sponsor | Requested Amour |
|--------|-------------------------------|------------------------|---------------------------------------|-----------------|
| | Hollybush Institute Expansion | | National Endowment for the Humanities | |
| Initia | ative | Hague, Stephen | (NEH) | \$ 500,00 |

College of Humanities & Social Sciences Awards & Proposals

| College of Humanities and Social Sciences | | | | | | | | |
|---|------|--------------|---|-------------|------------|--|--|--|
| | PROI | POSALS | | AWARDS | | | | |
| | # | Amount | # | # Indirects | | | | |
| Dean's Office | 5 | \$ 1,232,251 | 2 | \$ 10,267 | \$ 103,385 | | | |
| Political Sciences & Economics | 1 | \$ 40,000 | 2 | \$ 20,895 | \$ 67,330 | | | |
| Sociology & Anthropology | - | \$ - | - | \$ 4,643 | \$ - | | | |
| Law and Justice | 2 | \$ 262,732 | 1 | \$ - | \$ 14,953 | | | |
| Hollybush Institute | 1 | \$ 500,000 | - | \$ - | \$ - | | | |
| History | 3 | \$ 215,072 | 1 | \$ - | \$ 59,208 | | | |
| Total | 12 | \$ 2,250,055 | 6 | \$ 35,805 | \$ 244,876 | | | |

Awards

Dean's Office

| Title | Principal Investigator | Sponsor | Awarded Amount | Indirect Awarded |
|---|------------------------|--|-------------------|---------------------|
| Protecting Immigrant Women and their Children from Violence and Family Separation | | American University (Prime: W. K. Kellogg Foundation) | \$ 78,717 | \$ 10,267 |
| A Multi-sector Partnership to Investigate and Develop Policy and Practice Models to dismantle Rape culture in Universities | Ammar, Nawal | McGill University | \$ 24,668 | \$ - |

Political Sciences & Economics

| Title | Principal Investigator | Sponsor | Sponsor Awarded Amount | |
|---|------------------------|--|------------------------|-----------|
| Geospatial Factors and the trafficking/ Terrorism Nexus in Eurasia | | The University of Kansas (Prime: Dept. of Defense) | \$ 37,330 | \$ 11,585 |
| Geospatial Factors and the trafficking/ Terrorism Nexus in Eurasia | | The University of Kansas (Prime: Dept. of Defense) | \$ 30,000 | \$ 9,310 |

Law and Justice

| Title | Principal Investigator | Sponsor | Awarded Amount | ndirect warded |
|---|------------------------|--------------------------------|-------------------|-----------------------|
| Understanding the Needs and Experiences | | Justice Research and Statistic | | |
| of Families and Friends of Homicide Victims | Mastrocinque, Jenna | Association | \$ 14,953 | \$ 4,643 |

History

| | Title | Principal Investigator | Sponsor | | Awarded Amount | Indirect Awarded | |
|---|------------------------------|------------------------|--------------------------------------|----|-------------------|---------------------|--|
| Ν | Megan M. Giordano Fellowship | | Gloucester County Parks & Recreation | \$ | 59,208 | \$ | |

Engineering / SJTP Awards & Proposals

| Title | Principle Investigator | Sponsor | Awarded Amount | Indirect Awarded |
|---|------------------------|-----------------------------|----------------|------------------|
| EAGER: Developing a Consortium Model for the Successful Implementation of the Rising Engineering Education Faculty Experience (REEFE) | Hixson, Cory | National Science Foundation | \$ 13,853 | \$ 4,618 |
| Utilizing the 3Cs to Reimagine Engineering Education at Rowan University | Cheryl Bodnar | KERN Family Foundation | \$ 295,209 | \$ - |

Mechanical Engineering

| Title | Principal Investigator | Sponsor | Awarded Amount | Indirect Awarded |
|---|------------------------|-----------------------------------|----------------|------------------|
| Team-Based Projects to Improve Student Design Experience | Kadlowec, Jennifer | National Institutes of Health | \$ 43,200 | \$ 3,200 |
| Polymer Nanocomposites with Enhanced Dielectric Strength and Reduced Thermal Contraction for Superconductor Cables | Xue, Wei | US Department of Defense | \$ 150,000 | \$ 4,333 |
| Improving the Engineering Clinic Curriculum to include Innovation and Entrepreneurship components | Osta, Anu | Procter Gamble | \$ 10,000 | \$ - |
| To design the next generation of Seal Force Tester for Genesis Packaging Tech. | Anu Osta | Genesis Packaging Technologies | \$ 13,080 | \$ 4,360 |

Proposals

Dean's Office

| Title | Principal Investigator | Sponsor | Requeste | ed Amount |
|--|------------------------|----------------------------|----------|-----------|
| Attracting Women to Engineering | Basantis, Melanie | Atlantic City Electric | \$ | 5,000 |
| 2017-2018 PSEG Proposal for AWE & RISE | Basantis, Melanie | PSEG Nuclear, LLC | \$ | 50,000 |
| Development of electrochemical cell | Lowman, Anthony | Sekisui Chemical Co., Ltd. | \$ | 150,000 |

Biomedical Engineering

| Title | Principal Investigator | Sponsor | Requested Amount |
|---|------------------------------|--|------------------|
| CAREER: The effect of aging on waste clearance in the brain | Galie, Peter | National Science Foundation | \$ 500,396 |
| Transplantation of pre-vascularized scaffold for spinal cord injury repair | Galie, Peter | Craig H. Neilsen Foundation | \$ 298,278 |
| Multiscale simulation of graphene coated transition metal oxide with atomic defects for high rate application in Li-ion battery | Seyyedhosseinzadeh, Hamed | National Science Foundation | \$ 454,178 |
| REU Site: Biomedical Materials, Devices, Therapeutics, and Emerging Frontiers | Staehle, Mary | National Science Foundation | \$ 437,517 |
| Robossis: Orthopedic Surgical Robot | Abedin Nasab, Mohammad | New Jersey Health Foundation, Inc. | \$ 35,000 |
| A novel surgical robot for spinal interventions | Abedin Nasab, Mohammad | NJ Commission on Spinal Cord Research | \$ 200,000 |
| Mechanically Robust Nanofiber Grafts for Ligament Repair | Beachley, Vincent | New Jersey Health Foundation, Inc. | \$ 35,000 |
| Transplantation of pre-vascularized scaffold for spinal cord injury repair | Galie, Peter | Craig H. Neilsen Foundation | \$ 298,278 |
| Transplantation of pre-vascularized scaffold for spinal cord injury repair | Galie, Peter | National Institutes of Health | \$ 432,953 |

Engineering / SJTP Proposals

Biomedical Engineering cont.

| Biomedical Engineering cont. | | | | | | |
|---|------------------------|--|------------------|--|--|--|
| Title | Principal Investigator | Sponsor | Requested Amount | | | |
| Transplantation of pre-vascularized scaffold for spinal cord injury repair | Galie, Peter | National Institutes of Health | \$ 432,953 | | | |
| Transplantation of pre-vascularized scaffold for spinal cord injury repair | Galie, Peter | NJ Commission on Spinal Cord Research | \$ 197,498 | | | |
| Measurement of BPDE DNA adducts by using nanopores | Shim, Jiwook | National Institutes of Health | \$ 447,146 | | | |
| Cancer Detection at molecular level using nanopore | Shim, Jiwook | New Jersey Health Foundation, Inc. | \$ 35,000 | | | |
| REU Supplement for Summer Undergraduate Researchers | Beachley, Vincent | National Science Foundation | \$ 15,932 | | | |
| Acquisition of a super-resolution microscope for research and training | Galie, Peter | National Science Foundation (NSF) | \$ 1,046,952 | | | |
| Supplement to NSF1728239 CMMI | Galie, Peter | National Science Foundation (NSF) | \$ 8,360 | | | |
| Detection of DNA Methylation with Nanopores in Atomically Thin 2D Materials | Shim, Jiwook | National Institutes of Health (NIH) | \$ 300,000 | | | |
| Solid-State Nanopore for Analyzing the Binding Status of Poly(C)-Binding Protein 4 in Cisplatin Resistant Cells | Shim, Jiwook | National Institutes of Health (NIH) | \$ 300,000 | | | |
| Nanopore-based selective detection of DNA methylation on promoter region | Shim, Jiwook | National Institutes of Health (NIH) | \$ 300,000 | | | |

Chemical Engineering

| Chemical Engineering | | | | | | |
|--|--------------------------|---|------|--------------|--|--|
| Title | Principal Investigator | Sponsor | Requ | ested Amount | | |
| CAREER: Nanostructured Particle Stabilized Bicontinuous Emulsions: Structure-Formation Principles, Structure Function Relationships and Biphasic Transport Processes | Haase, Martin | National Science Foundation | \$ | 500,000 | | |
| Liquid microfibers for continuously operated liquid-liquid extraction | Haase, Martin | National Science Foundation | \$ | 286,602 | | |
| Indo-US Joint Center for Enzymatic Hydrolysis and Chemical Catalysis of Wasted Biomass for Biochemicals Production | Montalbo-Lomboy, Melissa | Indo-U.S. Science and Technology Forum | \$ | 75.119 | | |
| CAREER: SusChEM: Sustainable Molecular Design and Fundamental Property Understanding of Polyesters Derived from Xylochemicals and Associated Educational Activities | Stanzione, Joseph | National Science Foundation | \$ | 311.488 | | |
| New 3D Printed Gradient Scaffold Platforms for Repair of the Annulus Fibrosus of the Intervertebral Disc | Vernengo, Andrea | National Institutes of Health | \$ | 24.735 | | |
| Liquid microfibers for continuously operated liquid-liquid extraction | Haase, Martin | National Science Foundation | \$ | 286,602 | | |
| Design and Fabrication of Flexible, Biodegradable and Implantable Bio-Battery | Noshadi, Iman | National Institutes of Health | \$ | 292,000 | | |
| Solvent-Free and Template-Free Synthesis of Nitrogen-Doped Mesoporous Polymer (NMP) and Metal Oxide/NMP nanocomposite for CO2 Capture and Conversion | Noshadi, Iman | National Science Foundation | \$ | 230,406 | | |
| Highly Elastic and Flexible Suopercapacitance for the Implantable Medical Devices | Noshadi, Iman | New Jersey Health Foundation, Inc. | \$ | 35,000 | | |

Engineering / SJTP Proposals Continued

ExEEd

| Title | Principal Investigator | Sponsor | Requested Amount |
|---|------------------------|-----------------------------|------------------|
| Utilizing the 3Cs to Reimagine Engineering Education at Rowan University | Bodnar, Cheryl | KERN Family Foundation | \$ 295,000 |
| Ideas at Play: Instilling an Entrepreneurial Mindset through Experiential Activities | Bodnar, Cheryl | National Science Foundation | \$ 599,905 |
| Training Faculty to Incorporate Principles of Universal Design into a Freshman Engineering Course | Mallouk, Kaitlin | University of Washington | \$ 2,100 |
| Collaborative Research: Exploring how students negotiate ambiguity and stakeholder input in community based design problems | Bodnar, Cheryl | National Science Foundation | \$ 98,759 |

Mechanical Engineering

| Mechanical Engineering | | | |
|--|------------------------|--|-----------------|
| Title | Principal Investigator | Sponsor | Requested Amoun |
| Preparing Women for a career in Entrepreneurship | Osta, Anu | Mazda Foundation | \$ 20,000 |
| Improving the Engineering Clinic Curriculum to include Innovation and Entrepreneurship components | Osta, Anu | Procter Gamble | \$ 10,000 |
| Integrating Computer Science into Physical Science Classrooms with Arduino | Mallouk, Kaitlin | National Science Foundation | \$ 436,488 |
| Elevated Temperature Effects on the Self- Ignition and Deflagration Potential of Pressurized Fuel and Process Gas Releases | Haas, Francis | American Chemical Society- Petroleum Research Fund (ACS PRF) | \$ 110,000 |
| Engineering Functional Polymer Foams | Xue, Wei | National Science Foundation (NSF) | \$ 300,000 |
| Incorporating Collegiate Entrepreneurship into Engineering Clinic Curriculum at Rowan University | Osta, Anu | Burton D. Morgan Foundation | \$ 18,000 |
| Fast-curing surgical adhesives for vocal fold wound closure | Miri Ramsheh, Amir | McGill University | \$ 111,516 |

Engineering / SJTP Proposals Continued

Electrical & Computer Engineering

| Electrical & Computer Engineering | | | |
|---|------------------------|------------------------------------|------------------|
| Title | Principal Investigator | Sponsor | Requested Amount |
| Big Data and Artificial Intelligence for Everyone: A University-Industry Endeavor to Prepare the Next Generation of Teachers | Bouaynaya, Nidhal | National Science Foundation | \$ 599,468 |
| Collaborative Research: ABI Innovation: Keeping up with the genomes: a framework to continually learn metagenomic data | Polikar, Robi | National Science Foundation | \$ 242,976 |
| CAREER: Memristors-Based Storage and Computing for Sustainable Space Applications | Shin, Sangho | National Science Foundation | \$ 512,465 |
| CRII: SaTC: Algorithms and System Control for Wideband Jamming Cancellation in Hybrid Radio Frequency and Free Space Optical Communication Networks | Wu, Ben | National Science Foundation | \$ 172,680 |
| Big Data and Artificial Intelligence for Everyone: A University-Industry Endeavor to Prepare the Next Generation of Teachers | Bouaynaya, Nidhal | National Science Foundation | \$ 599,468 |
| MRIMATH: COORDINATES AND VOLUMETRICS FOR BRAIN TUMORS | Bouaynaya, Nidhal | National Science Foundation | \$ 50,000 |
| Enabling Continual Learning and Curation of Microbiome Data | Polikar, Robi | Cornell University | \$ 326,339 |
| Highly-Sensitive Memristive Instrumentation for High- Speed Nanopore Sequencing | Shin, Sangho | National Science Foundation | \$ 358,130 |
| Memristors-Embedded CMOS (MEC) Technology | Shin, Sangho | National Science Foundation | \$ 348,699 |
| Exploratory Study:SPARC Systematic Problem-Solving & Algorithmic Reasoning (for Children) | Tang, Ying | New Jersey Health Foundation, Inc. | \$ 449,996 |
| Noninvasive 3 Dimensional Fluorescence Microscopy for Skin Disease Detection | Wu, Ben | National Science Foundation | \$ 35,000 |
| NRT-HDR: Rowan's Graduate Research Traineeship is Whole-Occupation Nurturing for the Data Revolution (Rowan's GReTr WONDR) | Bouaynaya, Nidhal | National Science Foundation | \$ 2,999,885 |
| Visualization and Analysis of Rotorcraft Safety within a CAVE Virtual Reality Environment | Lecakes, George | Federal Aviation Administration | \$ 65,668 |
| Development of a Tracheal Sound Sensor for early Detection of Hypoventilation due to Opioid Overdose | Polikar, Robi | RTM Vital Signs, LLC | \$ 45,463 |
| Collaborative Research: Enhancing STEM Education with Machine Learning and Artificial Intelligence Applications: A University-Industry Cooperative Strategy | Ramachandran, Ravi | National Science Foundation (NSF) | \$ 149,992 |
| Development of a Tracheal Sound Sensor for early Detection of Hypoventilation due to Opioid Overdose | Polikar, Robi | RTM Vital Signs, LLC | \$ 45,463 |

Engineering / SJTP Proposals Continued

Chemical Engineering (continued)

| Title | Principal Investigator | Sponsor | Requested Amount |
|---|------------------------|--|------------------|
| RUI: Collaborative Research: Greener Processes for the Sustainable Production of Bio-Based | | | |
| Photocurable Polymers | Stanzione, Joseph | National Science Foundation | \$ 104,667 |
| Engineered Materials and Materials Design of Engineered Materials (EMMDEM) - Tactical Shelters, NU Year 2 | Stanzione, Joseph | Northeastern University | \$ 186,000 |
| , | otanzione, oosepii | , | Ψ 100,000 |
| Responses of Dorsal Root Ganglion Neurons to Pulsed Electric Field Exposures | Thompson, Gary | NJ Commission on Spinal Cord Research | \$ 200,000 |
| Composite Injectable Hydrogels with Adhesive Properties for Nucleus Pulposus Tissue Engineering | Vernengo, Andrea | U.S. Department of Defense | \$ 1,357,764 |
| Understanding organizing principles and separation mechanisms of multifunctional nanocomposite membranes. | Haase, Martin | National Science Foundation (NSF) | \$ 303,125 |
| Liquid fibers for continuously operated liquid- liquid extraction | Haase, Martin | American Chemical Society- Petroleum Research Fund (ACS PRF) | \$ 109,980 |
| Bio-Ionic Liquid Conjugated Hydrogels as Highly Adhesive, Antimicrobial and Hemostatic Surgical Sealant for Traumatic Injury | Noshadi, Iman | National Institutes of Health (NIH) | \$ 1,538,867 |
| Bioprinting 3D hybrid heart patches with bioelectronics for cardiac tissue regeneration | Noshadi, Iman | National Institutes of Health (NIH) | \$ 407,994 |
| New 3D Printed Gradient Scaffolds for Repair of the Annulus Fibrosus of the Intervertebral Disc | Vernengo, Andrea | National Institutes of Health (NIH) | \$ 331,705 |
| Enhancing the Undergraduate Chemical Engineering Curriculum Using Dynamic Simulation | Dahm, Kevin | National Science Foundation (NSF) | \$ 296,930 |
| Roadmap for Solvent Recovery in Industrial Manufacturing: Enhancing Process Efficiency through Resource Minimization | Yenkie, Kirti | US Department of Environmental Protection Agency (USEPA) | \$ 264,361 |
| Natick Expeditionary Manuever - Cold Spray Additive Manufacturing of Polymers and Polymer Composites | Stanzione, Joseph | US Department of Defense | \$ 1,900,000 |
| Engineering 3D printed bioelectronics as smart self-oxygen generating tissue scaffold | Noshadi, Iman | National Institutes of Health (NIH) | \$ 2,380,608 |
| A Computational tool to predict chemotherapeutic doses for treatment of ALL (acute lymphoblastic leukemia): Balancing treatment efficacy and toxicity | Yenkie, Kirti | United States-India Science and Technology Endowment Fund | \$ 314,879 |

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Engineering / SJTP Proposals Continued

Civil and Environmental Engineering

| Civil and Environmental Engineering | | | | |
|--|------------------------|---|------------------|--|
| Title | Principal Investigator | Sponsor | Requested Amount | |
| CAREER: User-Centered Modeling and Data Analytics Framework for Transportation Networks | Bhavsar, Parth | National Science Foundation | \$ 654,427 | |
| Pothole Detection Module Development | Bhavsar, Parth | United States-India Science and Technology Endowment Fund | \$ 210,578 | |
| Traffic Count Sensor Development | Bhavsar, Parth | United States-India Science and Technology Endowment Fund | \$ 180,420 | |
| Biological Impacts on Lead Dissolution/ Leaching | Jahan, Kauser | Stevens Institute of Technology | \$ 367,999 | |
| Quantifying the Effect of Pressure on Inter-Particle Forces in Slurry Flow | Lomboy, Gilson | National Science Foundation | \$ 253,427 | |
| Evaluation of Reclaimed Asphalt Pavement | Mehta, Yusuf | AE Stone | \$ 2,195 | |
| Ruggedness and Interlaboratory Studies for Asphalt Mixture Performance Tester (AMPT) Cyclic Fatigue Test | Mehta, Yusuf | US Department of Transportation | \$ 699,999 | |
| An Innovative Decision Support Framework for Multi-Hazard Resilience Assessment of Vulnerable Structures | Nazari, Rouzbeh | National Science Foundation | \$ 379,368 | |
| Performance of DTIs with and without Bolt Face Washers | Riddell, William | Turnasure LLC | \$ 4,865 | |
| Determining Long-Term Field Performance of Concrete Pavements with Recycled Concrete Aggregates through Accelerated Pavement Testing | Lomboy, Gilson | American Concrete Institute | \$ 57,468 | |
| LTPP Data Analysis: Significance of As- Constructed Asphalt Pavement Air Voids to Pavement Performance | Mehta, Yusuf | US Department of Transportation | \$ 424,859 | |
| Regional UTC Program | Nazari, Rouzbeh | Rutgers, The State University of New Jersey | \$ 200,000 | |
| Aerial Photography for Seawall Repair and Construction Project | Nazari, Rouzbeh | NJ Department of Environmental Protection | \$ 60,479 | |
| Application of Historical Climate and Flood Data to Advance the Understanding of Environmental Shifts and Their Potential Impact on DoD Infrastructural Planning | | US Department of Defense | \$ 195,017 | |
| Collaborative Research: Time-dependent Performance of Bio-cemented Sand under Long-term Creep Loadings | Zhu, Cheng | National Science Foundation | \$ 121,039 | |
| Algae Based Curriculum for Promoting Careers in Science and Engineering | Jahan, Kauser | Braitmayer Foundation | \$ 35,000 | |

Engineering / SJTP Proposals Continued

Civil and Environmental Engineering cont.

| Title | Principal Investigator | Sponsor | Requested Amount |
|--|------------------------|--|------------------|
| MRI: Acquisition of a Nanoindenter for Research, Teaching, and Training | Lomboy, Gilson | National Science Foundation (NSF) | \$ 449,025 |
| Bridging of Information, Uncertainty, and Decision-Making in Extreme Storm Events with an Interdisciplinary Perspective on Climate, Community and the Built Environment | Nazari, Rouzbeh | National Science Foundation (NSF) | \$ 416,802 |
| Data Driven Multi-Hazard Reliability and Resilience Assessment of Vulnerable Coastal Communities | Nazari, Rouzbeh | National Science Foundation (NSF) | \$ 383,591 |
| Creation of a library of novel examples for an enriching geotechnical engineering learning experience | Zhu, Cheng | US Universities Council on Geotechnical Education and Research | \$ 5,000 |
| LTPP Data Analysis: Feasibility of Using LTPP Data to Develop Relationships Between Laboratory- and Field-Derived Properties of Unbound Materials | Mehta, Yusuf | US Department of Transportation | \$ 69,968 |
| Consultant's services to evaluate materials and performance of pavement layers using heavy traffic loads simulation device | Mehta, Yusuf | Ministry of Transportation, Saudi Arabia | \$ 3,273,642 |
| Measuring the Characteristics of Pavement Surface Images and Developing Standard Practices for Calibration, Certification, and Verification of Imaging Systems | Zhu, Cheng | TRB (Transportation Research Board of The National Academies) | \$ 599,940 |
| Creation of a library of novel examples for an enriching geotechnical engineering learning experience | Zhu, Cheng | US Universities Council on Geotechnical Education and Research | \$ 5,000 |
| Practical Study of Local and Regional Resilience Planning for Critical Infrastructure Systems and Communities in Coastal Zones | Nazari, Rouzbeh | Armand Corporation | \$ 152,020 |
| Traffic Impact Study | Mehta, Yusuf | NJ Department of Environmental Protection (NJDEP) | \$ 30,000 |
| 2018 National Summer Transportation Institute (NSTI) Youth Program Statement of Work Announcement | Mehta, Yusuf | NJ Department of Transportation (NJDOT) | \$ 114,222 |
| Innovative Construction Materials to Protect National Security Interests in the Arctic Region | Mehta, Yusuf | US Department of Defense | \$ 3,700,000 |
| FFS: Evaluation of laboratory performance of binder and Hot mix Asphalt | Mehta, Yusuf | American Asphalt Company | \$ - |
| FFS: Evaluation of binder and mixes | Mehta, Yusuf | South State Inc. | \$ - |
| Evaluation of Flow and Stability of Pellet Patch | Mehta, Yusuf | Energy Creates Energy | \$ 10,000 |

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