In FY 2011-2012, the Rutgers-Newark campus brought in $27,223,575 in external funding for research, education, outreach and training. This is the third highest amount in the history of the campus.

Unfortunately, the first and second highest amounts were in the two prior years. This total represents a 12% drop in funding from FY 2010-2011, the most productive year. Many universities experienced a similar drop because of the end in ARRA funding. At Rutgers-Newark, this may have contributed to the decrease in new funding but the main reason for the decrease was situational. The departure of several key faculty members, including the top person in terms of research funding, and move of another to an administrative position accounted for a significant amount of the decrease.

The main divisions that suffered through this attrition were CMBN and FASN. Other divisions experienced significant increases in external funding including Nursing, Criminal Justice and Public Administration.

The Research Office has and continues to investigate new opportunities to expand external funding and to streamline the grant process. A new committee on corporate relations is developing methods to attract and process corporate funding. Initiatives to leverage our excellent position for education and outreach have resulted in several new projects. In terms of streamlining the proposal process, endorsement forms can now be electronically signed and e-mailed rather than hand carrying paper copies. There is currently a study being conducted to investigate opportunities to streamline other processes in the Research Office. If anyone has suggestions that would improve their ability to submit proposals and obtain grants, please send them to me and I will include them in the study.

Another reason for the decrease in external funding is a decrease in proposals submitted in FY 2011-2012. The staff at the Research Office is eager to help you to identify opportunities and to help prepare and submit your proposal in a timely manner. We will also continue to offer seminars on ways to secure funding. If anyone has particular needs for a seminar or workshop, please send it to me and it will be addressed.

I wish you a productive year in FY 2012-2013.
FY 12 CUMULATIVE AWARDS MORE THAN $500,000

Brenda Hopper  
RBS/SBDC  
$3,553,260

William Holzemer  
College of Nursing  
$1,925,893

Deborah Walker—McCall  
Academic Foundations  
$1,220,084

Alexander Gates  
Chancellor’s Office  
$1,070,000

Wilma Friedman  
Biological Sciences  
$1,036,011

Barry Komisaruk  
Graduate School  
$772,776

Anthony Braga  
School of Criminal Justice  
$771,685

Denis Pare  
CMBN  
$765,395

Mauricio Delgado  
Psychology  
$741,816

Haesun Kim  
Biological Sciences  
$572,678

Karina Schafer  
Biological Sciences  
$547,546

Nihal Altan-Bonnet  
Biological Sciences  
$532,157

Alan Sadovnik  
SPAA  
$510,500

Lee Slater  
Earth & Environmental Sciences  
$507,286

Jonathon Eckstein  
Rutgers Business School  
$499,870
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<tr>
<th>Name</th>
<th>Surname</th>
<th>Organization</th>
<th>County</th>
<th>Sponsor</th>
<th>Project Title</th>
<th>Award Amount</th>
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<tr>
<td>Hopper</td>
<td>Brenda</td>
<td>RBC/NJSBDC</td>
<td>Deborah Smarth</td>
<td>US Small Business Administration</td>
<td>NJ Small Business Development Center</td>
<td>$2,945,060</td>
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<tr>
<td>Holzemer</td>
<td>William</td>
<td>College of Nursing</td>
<td>Robert Wood Johnson</td>
<td>Foundation</td>
<td>Faculty Preparation Program: New Jersey Nursing Initiative RWJF Phase II</td>
<td>$1,793,057</td>
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<tr>
<td>Gates</td>
<td>Alexander</td>
<td>Chancellor's Office</td>
<td>Alexander Gates</td>
<td>NSF</td>
<td>LSAMP - The Garden State Alliance for Minority Participation</td>
<td>$1,000,000</td>
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<tr>
<td>Komisaruk</td>
<td>Barry</td>
<td>FASN-Psychology</td>
<td>NIH/NIGMS</td>
<td>Minority Biomedical Research Support Program at Rutgers-Newark</td>
<td>$624,224</td>
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<tr>
<td>Kim</td>
<td>Haesun</td>
<td>FASN-Biological Science</td>
<td>NIH/NINDS</td>
<td>Effects of diffused axonal injury on myelin and myelianted axons</td>
<td>$540,000</td>
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<tr>
<td>Friedman</td>
<td>Wilma</td>
<td>FASN-Biological Science</td>
<td>NIH/NINDS</td>
<td>Modulating ProNGF-Induced Cell Death in Epilepsy: Strategies for Neuroprotection</td>
<td>$473,552</td>
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<td>Plinio</td>
<td>Alex</td>
<td>RBS</td>
<td>Prudential Foundation</td>
<td>Institute for Ethical Leadership: Prudential Nonprofit Executive Leadership Fellows Program</td>
<td>$450,000</td>
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<td>Pare</td>
<td>Denis</td>
<td>CMBN</td>
<td>NIH/NIMH</td>
<td>Associative properties of the perirhinal network</td>
<td>$421,246</td>
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<tr>
<td>Holzapfel</td>
<td>Claus</td>
<td>FASN-Biological Sciences</td>
<td>Kirk Moloney</td>
<td>Understanding and Combating the Fire-enhancing Impact of Non-native Annuals in Deserts</td>
<td>$403,787</td>
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<td>Jaekle</td>
<td>Frieder</td>
<td>FASN-Chemistry</td>
<td>NSF</td>
<td>Conjugated Organoboron Oligomers and Polymers: Functional Building Blocks for Supramolecular Structures</td>
<td>$400,000</td>
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<td>Jones</td>
<td>Rachel</td>
<td>College of Nursing</td>
<td>NIH/NINR</td>
<td>Reducing HIV Risk in Urban Women: Soap Opera Videos on Video-Capable Cell Phones</td>
<td>$394,119</td>
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<td>Altan-Bonnet</td>
<td>Nihal</td>
<td>FASN-Biological Science</td>
<td>NIH/NIAID</td>
<td>Assembly dynamics and role of PI4P enriched replication organelles for enteroviral RNA replication in vivo</td>
<td>$383,363</td>
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<td>Boxer</td>
<td>Paul</td>
<td>FASN-Psychology</td>
<td>NJ-Office of Justice Programs</td>
<td>Evaluation of Intervention Services for Gang-Involved Youth</td>
<td>$372,570</td>
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<td>Jordan</td>
<td>Frank</td>
<td>FASN-Chemistry</td>
<td>NIH/NIGMS</td>
<td>Structure and Mechanism of alpha-Ketoacid Decarboxylases and Dehydrogenases</td>
<td>$366,894</td>
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<tr>
<td>Eckstein</td>
<td>Jonathan</td>
<td>RBS-MSIS</td>
<td>NSF</td>
<td>Approximate Augmented Lagrangians: First-Order and Parallel Optimization Methods</td>
<td>$358,499</td>
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SINGLE AWARDS MORE THAN $300,000

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<thead>
<tr>
<th>Name</th>
<th>First Name</th>
<th>Department</th>
<th>Agency</th>
<th>Title</th>
<th>Amount</th>
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<tbody>
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<td>Hill</td>
<td>Diane</td>
<td>Chancellor’s Office-OUCP</td>
<td>City of Newark</td>
<td>RU READY for WORK</td>
<td>$351,680</td>
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<tr>
<td>Pare</td>
<td>Denis</td>
<td>CMBN</td>
<td>NIH/MIMH</td>
<td>Role of Intercalated amygdala neurons in the extinction of conditioned fear</td>
<td>$344,149</td>
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<td>Koos</td>
<td>Tibor</td>
<td>CMBN</td>
<td>NIH/NINDS</td>
<td>Optogenetic Analysis of Neostriatal Circuits Engaged by Cholinergic Interneurons</td>
<td>$338,333</td>
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<td>Maurel</td>
<td>Patrice</td>
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<td>NIH/NINDS</td>
<td>Nectin-like cell adhesion molecules and the mechanism of myelination</td>
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<td>Delgado</td>
<td>Mauricio</td>
<td>FASN-Psychology</td>
<td>NIH/NIDA</td>
<td>Neural mechanisms of avoidance learning and active coping via emotion regulation</td>
<td>$333,825</td>
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<td>Zaborsky</td>
<td>Laszlo</td>
<td>CMBN</td>
<td>NIH/NINDS</td>
<td>Afferent Regulation of Cholinergic Forebrain Neuron</td>
<td>$331,388</td>
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<td>Tepper</td>
<td>James</td>
<td>CMBN</td>
<td>NIH/NINDS</td>
<td>Nigrostriatal Dopamine Function.</td>
<td>$331,309</td>
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<td>Abercrombie</td>
<td>Elizabeth</td>
<td>CMBN</td>
<td>NIH/NINDS</td>
<td>Basil Ganglia Function in Huntington's Disease: Genetic Mouse Models</td>
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<td>Friedman</td>
<td>Wilma</td>
<td>FASN-Biological Science</td>
<td>NIH/NINDS</td>
<td>Neurotrophin Actions in the Injured Brain</td>
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<td>Delgado</td>
<td>Mauricio</td>
<td>FASN-Psychology</td>
<td>NIH/NIMH</td>
<td>Modulation of human reward circuitry by social factors</td>
<td>$326,942</td>
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<tr>
<td>Clear</td>
<td>Todd</td>
<td>School of Criminal Justice</td>
<td>US Dept. of Justice</td>
<td>Excellence In Policing</td>
<td>$299,691</td>
</tr>
</tbody>
</table>

The LSAMP program, under the direction of Alexander Gates, recently completed its third year of operations and has shown tremendous growth.

The Louis Stokes Alliances for Minority Participation is a true alliance incorporating the Newark and New Brunswick campuses along with Bloomfield and Essex County colleges, Fairleigh Dickinson, Kean, Montclair, New Jersey City and William Patterson universities.

On the Newark campus participants are mentored by faculty spanning several departments. Students are also involved in the Minority Biomedical Research Support on the campus (Barry Komisaruk).

The program aims to diversify the STEM workforce through their efforts at significantly increasing the numbers of students successfully completing high quality degree programs in science, technology, engineering and mathematics (STEM) disciplines.
BY DEPARTMENT

CHANCELLOR’S OFFICE
Office of University-Community Partnerships
$424,680
Paul Robeson Gallery - $14,701
LSAMP - $1,000,000
Child Care Access - $77,578

FACULTY OF ARTS AND SCIENCES
Academic Foundations - $1,220,084
Biological Sciences - $3,674,081
Chemistry - $1,268,394
Classical & Modern Languages & Literature - $6,647
Earth and Environmental Sciences - $825,855
English (Creative Writing) - $3,400
History (IECME) - $96,246
Math and Computer Sciences - $584,138
Physics - $8,947
Psychology - $1,527,915
Social Work - $24,922
Sociology and Anthropology - $40,000
Urban Education - $416,882

RUTGERS BUSINESS SCHOOL
Dean’s Office - $282,368
Finance & Economics - $85,895
Institute for Ethical Leadership - $511,659
Management and Global Business - $237,526
Mgt. Science & Information Systems - $759,397
RU Technical Assistance Project - $100,000
Supply Chain Mgt. & Marketing Science - $15,000
The above figures may be reflective of the post effects of the American Recovery and Reinvestment Act of 2009 (ARRA).

The School of Criminal Justice, School of Law and the College of Nursing show increases over the prior year.

The College of Nursing numbers were boosted by receipt of a $1,793,057 grant from the Robert Wood Johnson Foundation. The funds support the New Jersey Nursing Initiative (NJNI) Faculty Preparation Program under the direction of William Holzemer, Dean of the College of Nursing.

The NJNI goal is to “develop, implement and evaluate a statewide model for recruitment and retention of nurse faculty in New Jersey” with particular emphasis on Ph.D. prepared nurse faculty.

The Dana Library Institute of Jazz Studies, Vincent Pelote, received $165,000 from The Andrew W. Mellon Foundation to support the project to catalog five jazz collections of prominent women in jazz—Ella Fitzgerald, Abbey Lincoln, Annie Ross, Victoria Spivey and Wilma Dobie.
### BY FUNDING AGENCY TYPE - FY12 / FY11

![Bar chart showing funding distribution by agency type for FY12 and FY11.]

### BY FUNDING AGENCY DOLLARS - FY08 - FY12

<table>
<thead>
<tr>
<th></th>
<th>FY12</th>
<th>FY11</th>
<th>FY10</th>
<th>FY09</th>
<th>FY08</th>
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<tr>
<td>Federal - NIH</td>
<td>$6,556,042</td>
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<td>$5,291,282</td>
<td>$3,940,598</td>
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<td>Federal - NSF</td>
<td>$3,348,047</td>
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<td>$5,541,945</td>
<td>$3,701,860</td>
<td>$2,815,480</td>
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<td>Federal - Other</td>
<td>$7,195,823</td>
<td>$8,998,700</td>
<td>$6,029,821</td>
<td>$4,883,440</td>
<td>$4,370,385</td>
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<td>Federal Indirect (Subcontracts)</td>
<td>$939,016</td>
<td>$1,662,385</td>
<td>$1,526,664</td>
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<td>N/A</td>
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<td>Corporate and Foundation</td>
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<td>$3,704,639</td>
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<td>Foundations</td>
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<td>N/A</td>
<td>N/A</td>
<td>$8,065,970</td>
<td>$4,002,420</td>
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<td>Industry</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>$512,995</td>
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<td>Other</td>
<td>$1,304,696</td>
<td>$819,706</td>
<td>$361,437</td>
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<td>Other</td>
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<td>$2,222,068</td>
<td>$1,693,483</td>
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<td>State of NJ</td>
<td>$1,505,734</td>
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<td>$1,573,506</td>
<td>$1,835,625</td>
<td>$1,404,571</td>
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<tr>
<td>Local Govt.</td>
<td>$490,880</td>
<td>$1,039,747</td>
<td>$353,663</td>
<td>$423,000</td>
<td>$329,450</td>
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<td><strong>TOTAL</strong></td>
<td><strong>$27,223,575</strong></td>
<td><strong>$30,996,000</strong></td>
<td><strong>$30,055,813</strong></td>
<td><strong>$26,936,240</strong></td>
<td><strong>$19,477,101</strong></td>
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BY AWARD TYPE

NEW  123
CONTINUATION  55
RENEWAL  28
SUPPLEMENT  6
INCREMENT  3

WHY EVERY GRANT COUNTS

<table>
<thead>
<tr>
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<th>FY11</th>
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<td>$500,000—$3,000,000</td>
<td>2%</td>
<td>4%</td>
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<td>$300,000—$499,000</td>
<td>9%</td>
<td>9%</td>
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<tr>
<td>$150,000—$299,999</td>
<td>15%</td>
<td>17%</td>
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<tr>
<td>$50,000 —$149,999</td>
<td>23%</td>
<td>25%</td>
</tr>
<tr>
<td>Under $50,000</td>
<td>51%</td>
<td>45%</td>
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</tbody>
</table>

ENSURING THE FUTURE

The Academic Foundations Center as part of its mission “provides academic opportunities, resources, and support programs primarily for underrepresented students to achieve success through education”.

Undergraduate Academic Programs and Pre College Programs provide academic and service programs that ensure the success of students ranging from the sixth grade through college graduation.

In support of that mission the Director, Deborah Walker-McCall, and her team were successful in obtaining funding from the U.S. Department of Education Trio Programs—Talent Search and Upward Bound. The two Talent Search programs focus on the East Orange and Irvington and Orange neighborhoods. The Center was also the recipient of support funds from the New Jersey Higher Education Aim High Academy for the Summer Earth Ecology Program (SEED).

The blend of research and education is demonstrated in the National Science Foundation funded project New Hybrid Materials based on Organosilicon and Organoboron Polymeric Scaffolds under the direction of John Sheridan and Freider Jaekle. Some of the students involved in the Academic Foundations’ SEED project are also summer interns on this project. The project also expands on the departmental Polymer and Materials Chemistry Outreach Programs with Newark high schools.

This particular project is the design and preparation of novel materials that are stimuli responsive, e.g. the materials properties such as color, magnetism, softness, crystallinity, shape etc, can be changed through the application of an external stimulus such as light (UV or visible), electricity, pressure, heat or addition of certain chemicals. Stimuli-responsive materials have an increasing importance in many new technologies. This novel approach involves the inclusion of transition-metal atoms (e.g Ru, Fe, Pt etc) into polymers by attaching these atoms to groups that contain boron and silicon atoms. The metals are susceptible to a variety of stimuli, not easily found in non-metal containing compounds. The choice of both boron or silicon containing linkers to the metal atoms extends the variety of metals that can be used and their interactions with the polymer chains. In the presence or absence of various stimuli, the metals respond and change their mode of binding, thereby changing the overall properties of the material.
THE STORIES AND THE PEOPLE BEHIND THE NUMBERS

The total award dollars for FY12 was $27,223,575 based on the internal records of the Research Office. The amount reflects a reduction of just over 12% from FY year 11.

Federal dollars accounted for 63% of total award dollars.

The Small Business Development Centers in New Jersey are supported by the US Small Business Administration which is the largest single annual source of federal dollars to the campus. The Center is managed by Brenda Hopper and her team.

The Department of Biological Sciences recorded the largest total dollar awards, followed by CMBN.

The College of Nursing and the School of Criminal Justice recorded total increases over FY11, along with SPAA and the School of Law.

Several Young Investigators changed ranks by receiving their first federal funding including—Jonathan Eckstein, Nan Gao, Patrice Maurel, Ioannis Sakellardis and Hui Xiong.

Karina Schafer, Department of Biological Sciences, is a very busy person on campus. She has several active projects funded by the NSF, Dept. of Energy and the USDA Forest Service. Her projects examine the environmental impact of carbon sequestration in the New Jersey Pine Barrens along with the greenhouse gas balance of urban temperate wetlands. The crystal ball shows more new awards in FY13.

The Paul Robeson Gallery, under the direction of Anonda Bell, received another citation of excellence from the New Jersey State Council on the Arts in recognition of the highest possible assessment of a project proposed for funding. The proposals are reviewed by esteemed, independent panels of peers.

Anthony Braga, School of Criminal Justice, spearheads the project on Analyzing Violent Crime and Illicit Drugs Market Problems in Newark, New Jersey. Funding is provided by several agencies that include the Community Fund of New Jersey, Victoria Foundation, Prudential Foundation, Nicholson Foundation and PSE&G.
CONGRATULATIONS

NEWARK CAMPUS

FY12

This state-of-the-art MRI facility, opened in May 2011, enables researchers with Rutgers, other institutions in the region and the business world to conduct a wide variety of studies.

http://researchoffice.newark.rutgers.edu/

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