

## **H. MAJOR RESEARCH AND PUBLIC SERVICE ACTIVITIES**

### **1. Research & Development Expenditures, 2011-2012**

<b>Item</b>	<b>Amount (\$)</b>
<b>Federally Financed Academic R&amp;D Expenditures</b>	1,190,733
<b>Institutionally Financed Academic R&amp;D Expenditures</b>	838,303
<b>Total Academic R&amp;D Expenditures</b>	2,029,036

Source: Office of Research and Sponsored Programs, Kean University 2012

Note: Dollar amount as reported to the National Science Foundation (NSF) on Form #411 (Survey of Research and Development Expenditures at Colleges and Universities).

### **2. Externally Sponsored Research**

The Office of Research and Sponsored Programs (ORSP) seeks external funding to support and enhance faculty and student research, curricular development and innovation, and community outreach programming. The Office administers the University's grants and contracts (internal and external) from the pre-award stage through final reporting, and provides oversight to Kean's centers and institutes. ORSP serves as the University's liaison with public foundations, and is responsible for compliance regarding federal and state regulations. The following table lists the externally sponsored research programs by award amount:

<b>Project Director</b>	<b>Project Title</b>	<b>Agency</b>	<b>Amount (\$)</b>
De Garcia, William	The Exceptional Educational Opportunities	New Jersey Higher Education	1,137,025
Martin, Arlene	Professional Impact New Jersey	New Jersey Department of Human Services	990,838
Kelly, Audrey	Local Fire Fighters Training	New Jersey Department of State	829,202
Baldwin, Brian	Math and Science Partnership	New Jersey Department of Education	621,755
Hassett-Walker, Connie	Effects of Criminal Justice System Exposure on Youth's Substance Use Trajectories	National Institutes of Health	458,434
Polirstok, Susan	Garden State Partnership for Teacher Quality	United States Department of Education	367,601
Jackson, Veronica	Upward Bound	United States Department of Education	290,430
Polirstok, Susan	New Vistas Teachers Project	United States Department of Education	279,251
Knezek, Claudia	Traffic Safety Program	New Jersey Division of Highway Traffic Safety	248,772
Beaugris, Jennifer	McNair Scholars	United States Department of Education	220,000
Bonillas, Consuelo	New Jersey Personal Responsibility Education Program	New Jersey Department of Health and Senior Services	175,000
Cerda, Victoria	Hispanic Foster Care - Hudson	New Jersey Division of Youth and Family Services	169,641

Bonillas, Consuelo	Healthy Behaviors in Women and Families	Health Resources and Services and Administration	166,043
Kostak, Mira	The New Jersey Small Business Development Center - Operational Support	United States Small Business Association	164,538
Shulman, Martin	Speech Upgrade	New Jersey Department of Education	141,243
Cerda, Victoria	CARAS Metro Family	New Jersey Division of Youth and Family Services	140,000
Searson, Michael	Startalk 2012	National Foreign Language Center	124,657
Caceres, Jose	New Jersey AIM Academy Initiative	New Jersey Higher Education	115,129
Chang, George	Garden State LSAMP (Louis Stokes Alliance for Minority Participation)	National Science Foundation	100,608
Porta, Angela	AREA Grant: Claudin-2, Claudin-12 and Cadherin-17: Novel Targets of Vitamin D Action	National Institutes of Health	79,419
Krause-Parello, Cheryl	Working Dogs for Wounded Warriors: Effects of Animal-Assisted Therapy	Uniformed Services University of the Health Sciences	78,451
Chen-Hafteck, Lily	Educating the Creative Mind	National Endowment for the Arts	77,000
Campbell, Minnie	New Jersey Nursing Education Collaborative	Robert Wood Johnson Foundation	76,144
Qi, Feng	Influenza Transmission: Exploratory Visualization and Knowledge Discovery	National Institutes of Health	74,878
Glazewski, Barbara	Autism Special Skills Program	Elizabethtown Healthcare Foundation	60,000
Murphy, Charles	Highlands to Piedmont	National Science Foundation	43,150
Foreman, Lindy	Scholarships for Mature Women Students	The Charlotte W. Newcombe Foundation	42,000
Polirstok, Susan	Professional Development in Sheltered English Instruction	New Jersey Department of Education	40,000
Foreman, Lindy	Rummel Scholars	Rummel Foundation	35,000
Campbell, Minnie	Advanced Education Nursing Traineeships	Health Resources Services Administration	22,078
Jackson, Veronica	Upward Bound	United States Department of Education	21,639
McKenzie, Sharon	Mentored New Investigator Research Grant	Alzheimer's Association	17,572
Wooten, John	Premiere Stages	New Jersey State Council on the Arts	17,228
Chen-Hafteck, Lily	AIRS (Advancing Interdisciplinary Research in Singing)	University of Prince Edward Island	16,500
Morreale, Patricia	2011-2012 Collaborative Research Experiences for Undergraduates (CREU)	Williams College	15,000
Foreman, Lindy	NJCSTM Scholarships	Wells Fargo	15,000

Kostak, Mira	Small Business Development Center	New Jersey Business Action Center	14,218
Santo Pietro, Mary Jo	Institute for Adults Living with Communication Disabilities	Kessler Foundation	13,000
Croft, Paul	Fog Research to Operations Using FOES-R	University Consortium for Atmospheric Research	12,900
Morreale, Patricia	CS4HS Workshop	Google	10,000
Foreman, Lindy	Robert Sydney Needham Scholarship Program	Robert Sydney Needham Foundation	10,000
Gambini, Lindsay	Sean Curran Company	New England Foundation for the Arts	10,000
Wooten, John	Premiere Stages	Shubert Foundation	10,000
Krause-Parello, Cheryl	Canine Companionship During Forensic Interviews	American Nurses Foundation	10,000
Martin, Arlene	Effectiveness of NJ Registry	Nicholson Foundation	9,740
Jackson, Veronica	Upward Bound	Novartis	9,500
Dobosiewicz, John	Environmentors	National Council for Science and the Environment	8,803
Gambini, Lindsay	American Masterpieces 2012	Mid Atlantic Arts Foundation	6,000
Wooten, John	Premiere Stages	Northfield Bank Foundation	5,000
Wooten, John	Premiere Stages	The Westfield Foundation	5,000
Gardner, Jennifer	Par Fore Program	Stony Brook Foundation	5,000
Krause-Parello, Cheryl	Examining Stress Indicators in Sexually Abused Children: Canine Companionship during Forensic Interviews	Sigma Theta Tau International Honor Society in Nursing	4,996
Mercantini, Jonathan	The Weary and the Wounded: The Civil War Viewed from a Hospital Ship	New Jersey Historical Commission	3,000
Wooten, John	Premiere Stages Liberty Live	New Jersey Historical Commission	3,000
Wooten, John	Premiere Stages	Provident Bank	2,500
Mercantini, John	When Did World War II Start?	New Jersey Council for the Humanities	1,500
Tetkowski, Neil	For All the World to See: Visual Culture & The Struggle for Civil Rights	National Endowment for the Arts	1,000
		Total	7,626,383

Source: Office of Research and Sponsored Programs, Kean University 2012

### 3. Internally Sponsored Research

Kean University established the Reassigned Time for Research (RTR) Awards program to support the faculty's active interest in research and other scholarly pursuits in 1973. Through this program,

the University conducts an annual review and selects faculty, professional personnel, and librarians to receive research awards of released time and limited direct costs. Projects funded by Reassigned Time for Research serve to advance the state of the art or knowledge in a particular field of study or professional activity, or to develop a particular area of research or creative work to the point where it can be shared beyond the Kean University community.

Four RTR projects were funded for the 2011-12 academic year. Successful applicants receive a maximum of six credits of reassigned time during the academic year and a \$400 stipend for equipment, supplies and other needs associated with their research.

Six non-tenured faculty research projects (UFRI) were funded for the 2011-12 academic year. As with the RTR awards, successful applicants receive six credits of reassigned time during the academic year and a \$400 stipend for equipment, supplies and other needs associated with their research.

The Students Partnering with Faculty (SpF) Summer Research Program is a competitive program that has been developed to support and advance student and faculty research and scholarship at Kean University. Through the SpF program, full-time faculty will have the opportunity to submit proposals in collaboration with undergraduate full-time students enrolled in the current semester for the purpose of attaining funding toward a specific student-faculty research project. Students and faculty each receive \$3,500 stipends and up to \$2,000 for research supplies and expenses. Thirteen projects were funded during summer 2011.

The Foundation Faculty Research Award (FFRA) is sponsored by the Kean University Foundation and was initiated this academic year. The fundamental goal of FFRA is to help faculty better position themselves to apply for and receive external funding for their research and scholarly activities. Faculty can apply annually for three consecutive years of funding for up to \$5,000 annually. Seven faculty members received this award for the 2011-2012 academic year.

The Presidential Scholars Challenge (PSC) funds faculty research initiatives in areas important to the strategic vision and core initiatives of the University. The grant provides bridge support to faculty researchers who then pursue external funding to continue their research program. Six faculty received award amounts ranging from \$31,000 to \$65,000

#### ***Reassigned Time for Research Awards (RTR)***

GIS and Satellite Analysis to Visualize and Discern Fog Processes  
*Paul Croft, Geology/Meteorology*

Behavioral and Psychobiologic Effects of Animal-Assisted Therapy on Traumatic Stress Disorder in Child Survivors of Sexual Abuse  
*Cheryl Krause-Parello, Nursing*

Art Matters: Appreciating Art, Design & Visual Culture  
*Robin Landa, Design*

Analysis of Stochastic Production Systems with the Option of Outsourcing  
*Bin Zhou, Management and Marketing*

#### ***Untenured Faculty/Librarian Research Initiative Awards (UFRI)***

Molecular Characterization and Absorbance Spectra of Visual Pigments from the Mysticete Whales  
*Jeffry Fasick, Biology*

Liberty Hall Museum Archives Digitization Project  
*Jonathan Mercantini, History*

Synthesis and Evaluation of Small-Molecule Inhibitors of Cell Surface Receptors for Treatment of Autoimmune Diseases  
*James Merritt, NJCSTM*

Winged Words: The Ecstatic Poetic Tradition & Human Flourishing  
*Donald Moores, English*

Racing the City: Intentional Integration and the Pursuit of Racial Justice in Post-WWII America  
*Abigail Perkiss, History*

Rethinking Assessment for 21st Century in Teacher Education: From Process to Product, from Self-Assessment to Teacher Work Samples From E-portfolios to Digital Stories  
*Melda Yildiz, School of Global Education and Innovation*

***Students Partnering with Faculty Summer Research Program Awards (SpF)***

Investigating the Effectiveness of Various Professional Development Models for Early Childhood Teachers  
*Jennifer Chen (Faculty), Valerie Schunk (Student), LeeAnne DeFazio (Student)*

Summer Thunderstorms in NJ: Risk Assessment, Visualization and Evaluation (Storms in NJ: RAVE)  
*Paul Croft (Faculty), Ben Crocker (Student), Nivash Rampersad (Student), Ryan Grantuskas (Student)*

Outsourcing – Friend or Foe of Shareholders?  
*Caroline Flammer (Faculty), Jinping Guo (Student), Magdalena Oleksiewicz (Student), Katarzyna Kosarska (Student)*

Knowing How, or the Place of the Instructional Manual in the Early Modern Private Library  
*Elizabeth Hyde (Faculty), William Barbieri (Student), David Mell (Student), Dara Berkey (Student)*

Out of the Dark: Designing a Solar Powered Light to be Used by The Homeless  
*Damon LaCapra (Faculty), Roberto E. Hernandez (Student), Roger Posso (Student)*

Synthesis and Evaluation of Small-molecule Inhibitors of Cell Surface Receptors for Treatment of Autoimmune Diseases  
*James Merritt (Faculty), Joe-Louis Yarfi (Student), Kelly Bachovin (Student)*

Wild Poets of Ecstasy: An Anthology of Ecstatic Verse, Volume 2  
*Donald Moores (Faculty), Gabriella Basile (Student), Joseph Purpurri (Student), Kelly Johnson (Student)*

Pattern Identification and Parallelization in Stream Data (PIPS)  
*Patricia Morreale (Faculty), Johana Callegari (Student), Jessica Howard (Student), Guillermo Valle (Student)*

Alternative Assessment Procedures of Language Disorder in Spanish-English and Chinese-English bilingual Children  
*Mahchid Namazi (Faculty), Kimberly Crespo (Student), Hingjui John (Student), Marissa Taveras (Student)*

The Claudins and Vitamin D Mediated Intestinal Calcium Transport  
*Angela Porta (Faculty), Edward Enners (Student), Elizabeth Bosque (Student)*

Simultaneous Positive and Negative Ionization High Resolution Mass Spectrometry (HRMS) for Measurement of Pharmaceuticals in Drinking Water  
*Dil Ramanathan (Faculty), Rebeca Pinhacos (Student), Karel Marshall (Student), Sara Maass (Student)*

Linking Above-Ground and Below-Ground Ecological Communities to Analyze Successful Changes in an Atlantic White-Cedar Swamp Restoration in the New Jersey Pine Barrens  
*Daniela Shebitz (Faculty), Elana Youssef (Student), Dan Rockefeller (Student), Kate Nemiera (Student)*

Development of Self-Contained Pulsatile Release (SCPR) Systems for Agricultural Applications  
*Dale Vitale (Faculty), Nelson Motta-Vivas (Student), Samantha Weber (Student)*

#### **Foundation Faculty Research Awards (FFRA)**

Molecular Characterization and Absorbance Spectra of the Visual Pigments from the Mysticete Whales  
*Jeffry Fasick, Biological Sciences*

Arboreal Negotiations: William Livingston, Andre Michaux, and the Cultural Politics of Trees in the Atlantic World  
*Elizabeth Hyde, History*

Victims of Proximate Assault: Re-Reading Post-Traumatic Testimonies  
*Dennis Klein, History*

Therapy Canines: Supporting Sexually Abused Children During Forensic Interviews  
*Cheryl Krause-Parello, Nursing*

The Efficacy of Three iPad Applications in Social Communication Skills Therapy for Children with Autism: A Pilot Study  
*Mahchid Namazi, Communication Disorder and Deafness*

Ladycalcin: A Novel Putative Calcium Binding Protein in the Ladybug  
*Angela Porta, Biological Sciences*

Evidence-based Assessment of Clinical Depression in Adults with Chronic Aphasia  
*Mary Jo Santo Pietro, Communication Disorder and Deafness*

#### **Presidential Scholars Challenge (PSC) and Presidents Research Initiative (PRI) Awards**

Therapy Dogs and Cardiac Health: The Effects of Animal Assisted Therapy on Stress Indicators in Senior Veterans  
*Cheryl Krause-Parello, Nursing*

Chemical Synthesis and Optimization of Fungi Transcription Factor Inhibitors (UPC2)  
*James Merritt, NJCSTME*

Graphic Design and Visual Identity  
*Robin Landa, Design*

Data Visualization for Human Computer Interaction  
*Patricia Morreale, Computer Science*

Cadherin-17 and Vitamin D Mediated Intestinal Calcium Absorption  
*Angela Porta, Biological Sciences*

Long Chain Poly Unsaturated Fatty Acids (LC-PUFAs) and Immune System Development  
*Evros Vassiliou, Environmental & Life Sciences*

Source: Office of Research and Sponsored Programs, Kean University 2012