### DOLLARS AWARDED BY SOURCE

<table>
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<tr>
<th>Source</th>
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<td>Federal Government</td>
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<tr>
<td>State of Illinois</td>
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<td>Corporate</td>
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<td>Public/Not for Profit</td>
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<tr>
<td>Foreign</td>
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### DOLLARS AWARDED BY PURPOSE

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### DOLLARS AWARDED BY COLLEGE

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<td>Other University Units</td>
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<tr>
<td>Total</td>
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ALLIED HEALTH AND COMMUNICATIVE DISORDERS

Department of Education for “Rehabilitation of Individuals who are Deaf or Hard of Hearing.”
Daniel L. Boutin.
Award: $93,253.00 (Cumulative Award: $293,060).

Funds will support students in a pre-service professional preparation program, training them to be counselors for persons who are deaf or hard of hearing.

Phonak Hearing Systems for “Evaluation of the Effectiveness of a Binaural Wind Noise Reduction Algorithm.” King Chung.
Award: $59,583.00.

Funds are being used to support testing to: 1) provide clinical evidence on the effectiveness of the first- and second-generation WNR algorithms implemented in Phonak digital hearing aids; 2) to compare the monaural and binaural implementations of the second-generation WNR algorithms; and 3) to shed light on how to improve future WNR algorithms.

Department of Education for “Certificate Program in Rehabilitation of Persons Who are Deaf-Blind.” Sue E. Ouellette.
Award: $98,181.00 (Cumulative Award: $493,324.00).

Funds are being used to support a certificate training program for rehabilitation professionals who work with persons who are deaf and blind.

ANTHROPOLOGY

Award: $19,800.00.

Funds are being used to examine how, when, and why Kenyan emigrants to the UK and USA send remittances to their stay-behind families, and how those relatives save these remittances or convert them into cash, commodities, foodstuffs, land, labor, livestock, social payments, merry-go-rounds, farm inputs, school fees, and gifts.

Department of State for “Philippine Youth Leader Program 2013: Environmental Leadership in the Philippines: Developing Youth as Agents of Change and Ecological Activism.” Susan D. Russell/Lina D. Ong.
Award: $252,354.00.
Funds will be used to conduct a U.S.-based four week exchange program to bring teenagers and adult educator volunteers from the Philippines to the U.S. for exposure to/training in civic education, leadership, diversity, and community engagement, and preparation to conduct projects at home that serve a community need.

**BIOLOGICAL SCIENCES**

Department of Agriculture for “Identification of Regulatory Genes in A. Flavus and A. Nidulans that are Involved in Mycotoxin Production, Morphogenesis, and Virulence.” Ana Calvo. Award: $7,000.00 (Cumulative $58,000.00). June 1, 2009 – May 31, 2013. Organized Research.

Funds are being used to further the understanding of the signaling pathways involved in the production of mycotoxins, and fungal development and the role of VeA in fungal virulence.


Funds are being used to address gaps in the data available to create a special survival plan for the eastern Massasauga rattlesnake.


Funds are being used to conduct annual censuses of Lake Erie Watersnakes (Nerodia sipedon insularum) on U.S. islands in Lake Erie to capture, tag, and release target snakes and estimate the size of the adult LEWS population.


Funds are being used to address gaps in the data available to create a species survival plan for the eastern Massasauga rattlesnake.


Funds are being used to provide expertise to Iowa State University in the lactic-acid producing biocatalyst.
CENTER FOR BURMA STUDIES


Funds will be used to support the 2012 International Burma Studies Conference, hosted at Northern Illinois University.

CENTER FOR SOUTHEAST ASIAN STUDIES


Funds will be used to support the Center for Southeast Asian Studies.

CHEMISTRY AND BIOCHEMISTRY


Funds are being used to support a graduate student (Nicole Potts), who will study the mechanisms of transcriptional activity of liver X receptors (LXRs) on the molecular level, and the elucidation of factors that can be exploited to design gene-selective LXR ligands in collaboration with Dr. Dmitry Kadnikov at MSU.


Funds will be used to follow a three step experimental procedure to synthesize 0.5 gram of compound with a purity of >90% as measured by HPLC analysis.


Funds will be used to synthesize 0.5 gram of compound with a purity of >90% as measured by HPLC analysis.
Caterpillar, Inc. for “Simulation and Scheduling for Building K.” Omar A. Ghrayeb/Reinaldo Javier Moraga
Award: $54,453.00.

Funds are being used to analyze the accumulation of work in process in areas throughout CAT's Building K facility.

Caterpillar, Inc. for “Aurora Campus Reverse Logistics Optimization.” Omar A. Ghrayeb/Reinaldo Javier Moraga.
Award: $55,162.00.

Funds are being used to identify areas that need improved reverse logistics in CAT's Aurora Campus.

Award: $23,500.00 (Cumulative $322,500.00).

Funds are being used to provide manufacturing and engineering advisory and assistance services for casting production, machining, heat treatment, metallurgy, welding, quality and process development to the Rock Island Arsenal/Joint Manufacturing Technology Center (RIA/JMTC).

Award: $660,000.00.

Aerospace Micro-Mesoscale Manufacturing (AM3) open manufacturing program addresses the productivity limitations of the current generation of direct digital manufacturing.

Lorin Industries for “UV-Vis and FTIR Spectroscopic Analysis.” Mansour Tahernezhadi/ Martin Kocanda
Award: $7,938.00.

Funds will be used to perform spectroscopic testing and analysis.
COMMUNICATION

Rowan University for “College Collaborative Documentary Project.” Laura R. Vazquez.
Award: $16,500.00.

Funds are being used to create a short form documentary that addresses the problem of sexual assault in colleges.

DIVISION OF RESEARCH AND GRADUATE STUDIES, DEAN'S OFFICE

XL Academics for “Support for Client Engagement Management at XL Academics.” Bradley G. Bond.
Award: $7,470.00.

Funds are being used to provide strategic development and execution of client facing marketing initiatives at XL Academics.

XL Academics for “Enhancing the XL Academic Website.” Bradley G. Bond.
Award: $29,880.00 (Cumulative $47,480).

Funds are being used to support four graduate students to update and enhance XLA’s website.

Illinois Manufacturing Extension Center (IMEC) for “Regional Host Organization for Illinois Manufacturing Extension Center.” Lisa Freeman/Anne C. Kaplan.
Award: $1,302,353.00.

Funds are being used to perform services directed toward increasing the productivity and global competitive advantage of regionally-based manufacturing and technology-related firms.

Illinois Board of Higher Education for “2012-2013 DFI Fellowships.” Lisa Freeman
Award: $192,000.00.

Funds are being used to support continued diversification of faculty at NIU.

ELECTRICAL ENGINEERING

Polar Technology Development Centre Ind. Trade, Inc. for “Theoretical Investigation on the use of Microwave Imaging for Bone Densitometry.” Veysel Demir.
Award: $25,998.00.

Funds are being used to theoretically investigate the feasibility of microwave imaging for bone density scans.
Argonne National Laboratory (ANL) for “Collaboration with ANL - Wireless Project.” Reza Hashemian.
Award: $7,500.00 (Cumulative $24,176.00)

Funds are being used to help develop a wireless data acquisition system that could be used on a large High Energy Physics (HEP) detector comprised of thousands of readout channels.

Motorola Foundation for “NIU - Enhancing Engineering Pathways (NIU-EEP) - Integrated Outreach and Mentoring Programs for Girl Scouts (Renewal).” Suma Rajashankar/Mansour Tahernezhadi/Promod Vohra.
Award: $50,000.00 (Cumulative $100,000.00).

Funds are being used to establish a sustainable pathway for the middle and high school girls through the Girl Scout Organizations and various school districts to the Field of Engineering.

ENGINEERING TECHNOLOGY

National Science Foundation for “Internet Accessible Remote Laboratories with Collaborative Design.” Abul K. Azad.
Award: $200,000.00.

The goal of this Type-1 project is to develop an environment through synergetic blending of emerging Internet technology, software, computer interfacing, cutting edge graphical user interface, effective pedagogical designs, and assessment and evaluation schemes. The environment will be used to offer a laboratory course within an undergraduate level electrical engineering technology program.

Award: $9,962.00 (Cumulative $30,622.00).

Funds are being used to develop Matlab models of the digital power converters with various magnetic loads, design digital regulators, and perform computer simulations to evaluate the performance of the digital power converters under static and dynamic conditions.

Award: $36,960.00.

Funds will be used to analyze process flow at RTM & Associates and make recommendations for improvement.
Argonne National Laboratory (ANL) for “Integrated Laboratory/Industry Research Program (ILIRP).” David Schroeder.
Award: $133,879.00 (Cumulative $350,564.00).

Funds are being used to study the various interfacial regions within the lithium-metal based electrochemical cell.

GEOGRAPHY

Argonne National Laboratory (ANL) for “Climate Change Impacts to Department of Defense (DOD) Installations.” David Changnon.
Award: $25,000.00.

Funds are being used to gather information about information needed by DOD weather-sensitive decision-makers at a selected DOD installation and develop a database and decision support tools to facilitate the decision-making process.

DeKalb County Economic Development Corporation (DCEDC) for “DCEDC Internship.”
Andrew J. Krmenec.
Award: $8,902.00.
August 16, 2012 – August 15, 2013. Other.

Funds are being used to support a Geography graduate student's valuable training experience at the DeKalb County Economic Development Corporation.

Award: $236,031.00.

Funds are being used to modernize and redesign the user interface and internal computer code for WILSIM, an online landform simulation tool, and to add a new module incorporating fluvial modeling.

Argonne National Laboratory (ANL) for “Joint Appointment: David Murphy.” David Murphy.
Award: $89,408.00 (Cumulative $179,640.00).

Funds will be used for a joint appointment between NIU and Argonne in support of Dr. David Murphy.

Award: $15,991.00.
Funds are being used to better understand how the invasion of Amur honeysuckle affects the Midwest native white oak population.

GEOLOGY AND ENVIRONMENTAL GEOSCIENCES


Funds will be used to complete the geologic interpretation and development of classified geospatial data on seafloor geology and geoform of central and southern Puget Sound.

HISTORY


The Solmsen Fellowship supports Prof. Fernandez in conducting research at The Institute for Research in the Humanities at the University of Wisconsin-Madison.


The proposed major project seeks to rescue, preserve, and facilitate access to the local historical records held in the PRAAD archives. This project will also train PRAAD’s staff in the technology and techniques of digitization and digital preservation.

INDUSTRIAL ENGINEERING


Funds are being used to analyze the paint lines at CAT's Aurora facility, and to make recommendations for improvement.

Funds are being used to assess the current cellular layout for, and to analyze the current state of the activities such as material flow, storage, etc. associated with, SPX's Power Team product line.


Funds are being used to analyze and streamline warehouse operations at Del Monte Foods.


Funds are being used to study the current state of Brocade's product lines and propose appropriate strategies to improve the overall performance.

INTERNATIONAL PROGRAMS


Funds were used to implement the Public Health and Health Education in Indonesia pilot summer study abroad program at Universitas Hasanuddin (UNHAS) in Makassar, Indonesia from June 4-22, 2012. A successful program includes the creation of promotional videos and other materials about studying abroad in Indonesia. PI will coordinate a post-program information session on the study abroad program aimed at attracting more students for future trips.

LEADERSHIP, EDUCATIONAL PSYCHOLOGY AND FOUNDATIONS


Funds will be used to conduct a quasi-experimental study to examine gender differences in the relationship between ability beliefs, utility beliefs, and academic outcomes in science classrooms.
LITERACY EDUCATION

Department of Education for “DREAMS: Development of Reading, ESL, Early Childhood, Math, and Science.” James Cohen/Norman A. Stahl II.
Award: $355,600.00 (Cumulative $660,750.00).

Funds will be used to train teachers who will earn the Illinois ESL and/or bilingual endorsement with an emphasis on STEM subjects.

MATHEMATICAL SCIENCES

Award: $140,000.00.

Funds will be used to provide a professional development program in mathematics education intended to engage secondary school teachers of mathematics in activities and experiences during a three-week summer institute activities and experiences, with in-school follow-ups during the academic year.

NURSING AND HEALTH STUDIES

Award: $44,675.00.

This study will use e-diaries to explore the association between micro-aggressions and mental health among a diverse group of women.

Kane County Health Department for “Evaluation of the Kane County Planning Cooperative.”
David Stone/James R. Ciesla.
Award: $4,000.00.

The evaluation will identify and explain the operative relationships and perspectives of the Kane County Planning Cooperative, examining the cooperative as a complete functioning, as an entity made up of cooperative organizations, and as a part of the county as a whole.

OUTREACH, ENGAGEMENT, AND INFORMATION TECHNOLOGIES

Award: $1,180,000.00.
Funds are being used to provide maintenance, upgrades, and other technical support for the Interactive Illinois Report Card web site.

PHYSICS


Funds are being used to support participation in the D0 experiment, participation in the ATLAS experiment, and investigation of new detector technologies.


Funds will be used for NIU’s participation in the ATLAS Project through the simulation of a particle detector response.


Funds are being used to develop novel tools necessary for accurate and efficient modeling, simulation and design optimization of electron cooling options for a future Electron Ion Collider, or any other nuclear physics facility where high luminosity, low transverse and longitudinal emittance are required.


Funds are being used to support the appointment of an NIU faculty member to conduct research and development activities under the direction and guidance of Argonne National Laboratory.


Funds are being used for a joint appointment between NIU and Argonne in support of Dr. Andreas Glatz.

National Science Foundation for “Research in High Energy Physics: Theory and Phenomenology of Supersymmetry.” Stephen P. Martin. Award: $45,000.00 (Cumulative $90,000.00).

Funds are being used to study the ways in which new particles predicted by supersymmetry might be detected and studied.


Funds are being used to support a graduate student's participation in a research project that will explore the feasibility of a hard X-ray free-electron laser to probe excited state of matter.

Fermi National Accelerator Laboratory for “Joint Appointment NIU/FNAL.” Philippe R. Piot. Award: $10,811.00 (Cumulative $142,827.00).

Funds are being used, per the NIU-Fermilab Memorandum of Understanding executed in December 2005, to support one-half of the PI's 9-month academic salary as a joint faculty appointee of the Department of Physics and Fermi National Accelerator Laboratory.

Fermi National Accelerator Laboratory for “Joint Appointment NIU/FNAL.” Young-Min Shin. Award: $8,222.00 (Cumulative $61,264.00).

Funds are being used, per the Memorandum of Understanding between NIU and FNAL, to support one-half of the PI's 9-month academic salary as a joint faculty appointee of the Department of Physics and the Fermi National Accelerator Laboratory.


Funds are being used to support post-doc participation in research efforts to enhance the understanding of resonant X-ray scattering techniques, both inelastic and elastic.

PSYCHOLOGY

LEARNING Partnership for “An Examination of the Qualities of Interactive Science Learning Environments that Promote Optimal Motivation.” Amanda M. Durik. Award: $50,304.00 (Cumulative $93,678.00).
Funds are being used to (1) conduct pilot studies to evaluate optimal measurement of motivational variables and help collect data off-site, (2) manage datasets and conduct data analyses, and (3) develop research reports.

Award: $354,358.00.

Funds are being used to study, using prairie voles as an animal model, whether an enriched environment prevents the negative consequences of social isolation, which underlies the documented association between depression and heart disease.

Award: $46,289.00 (Cumulative $157,313.00).

Funds are being used to carry out experiments on the comprehension of multiple documents among college freshmen, and possibly at primary and secondary schools in the northern Illinois region.

Award: $402,750.00.

Funds are being used to conduct a study to determine whether biological indicators of a heightened stress response predict posttraumatic stress symptoms in college age women. Participants for the current study will be recruited from a cohort of 812 women enrolled in the PI's longitudinal study at the time of the February 14, 2008 shooting.

Award: $30,444.00.

Funds are being used to support a psychology graduate student externship with Joliet School District.

Award: $17,031.00.

Funds are being used to support a graduate psychology externship at Genoa-Kingston School District.
Mid-Valley Special Ed Cooperative for “Psychology Graduate Externship at Mid-Valley Special Education Cooperative.” Greg Waas/Michelle Demaray/Christine E. Malecki.
Award: $18,923.00.

Funds are being used to support a psychology graduate externship at Mid-Valley Special Education Cooperative.

DeKalb County Court Services for Psychology Externship at DeKalb County Court Services.
Greg Waas/Alan Rosenbaum
Award: $21,408.00.

Funds are being used to support a psychology graduate externship at DeKalb County Court Services

**RESEARCH, EVALUATION AND POLICY STUDIES**

Award: $45,000.00 (Cumulative $90,000.00).
August 1, 2012 – August 31, 2013. Public Service.

Funds are being used to evaluate the school district's implementation of academic and enrichment opportunities for children in grades pre-kindergarten through 12 (Pk-12) to meet State and local student academic achievement standards in core academic subjects.

Missouri Foundation for Health for “Missouri Foundation for Health: Mental Health and Substance Abuse Evaluation.” Brent E. Wholeben/Ximena D. Burgin.
Award: 240,000.00 (Cumulative $679,373.00).

Funds are being used to conduct an evaluation of two Foundation grant programs; one program focuses on mental health treatment for children and youth and the other on behavioral health services offered for older adults.

Award: $8,355.00 (Cumulative $36,710.00).
August 1, 2012 – August 31, 2013. Public Service.

Funds are being used to conduct an evaluation plan for a 21st Century Community Learning Center grant program.

**SPECIAL AND EARLY EDUCATION**

Salus University for “Fellowship Support for Sean Tikkun.” Gaylen G. Kapperman.
Award: $31,900.00 (Cumulative $71,124.00).

Funds are being used to provide a fellowship to graduate student Sean Tikkun

Department of Education for “Preparation of Rehabilitation Teachers and Orientation & Mobility Specialists to Serve Adults with Visual Disabilities.” Gaylen G. Kapperman.
Award: $98,253.00 (Cumulative $358,217.00).

Funds are being used to offer a 12 month program to train graduate students to enter the fields of Rehabilitation Teaching and Orientation & Mobility.

Department of Education for “Program for Training of Teachers and Orientation and Mobility Instructors of Students with Visual Impairments, with On-campus and Summer-based Components with Additional Training in Assistive Technology.” Gaylen G. Kapperman.
Award: $200,000.00 (Cumulative $800,000.00).

Funds are being used to train graduate students to be teachers of students with visual impairments and to gain certification as orientation and mobility specialists.

STATISTICS

Award: $85,011.00.

Funds are being used to investigate methods to assess reliability for specific nanosystem/network topologies.

Abbott Laboratories Fund for “Abbott Laboratories Externship.” Rama T. Lingham.
Award: $40,000.00.

Funds are being used to support a graduate student from NIU’s Statistics Division in receiving real-world experience in the practice of statistics by working in the division of Data and Statistical Sciences of Abbott Labs.

STUDENT SUPPORT SERVICE

Department of Education for “Student Support Services for Northern Illinois University.” Jerry Wright.
Award: $349,671.00 (Cumulative $1,060,200.00).
Funds are being used to provide low-income, first generation, and/or physically or learning disabled students with comprehensive academic and career counseling services and cultural enrichment activities designed to enhance their persistence and graduation from the university.

V&PA EXTERNAL PROGRAMMING


The grant will allow us to bring guest artists and educators that will inspire the students in the community school to collaborate with public school orchestra programs, area youth choirs, the NIU School of Music string and music education programs, and the local orchestra.