

NORTHERN ILLINOIS UNIVERSITY  
OFFICE OF SPONSORED PROJECTS

SUMMARY OF GRANT/CONTRACT AWARDS – FISCAL YEAR 2011

October 1, 2010 – December 31, 2010

	<u>THIS REPORT</u>	<u>FY 2011 CUMULATIVE</u>
<u>DOLLARS AWARDED BY SOURCE</u>		
Federal Government	3,319,154	72,729,641
State of Illinois	2,333,343	7,161,339
Corporate	308,863	379,573
Public/Not for Profit	90,980	539,285
Foreign	0	0
 Total	 6,052,340	 80,809,838
<u>DOLLARS AWARDED BY PURPOSE</u>		
Instruction	368,906	3,013,907
Research	1,575,037	17,111,437
Public Service	3,269,181	58,820,028
Other	10,350	446,501
Academic Support	529,142	1,118,241
Student Services	299,724	299,724
 Total	 6,052,340	 80,809,838
<u>DOLLARS AWARDED BY COLLEGE</u>		
College of Business	29,502	29,502
College of Education	260,208	3,990,249
College of Engineering and Engineering Technology	704,219	3,932,066
College of Health and Human Sciences	97,680	196,470
College of Law	0	0
College of Liberal Arts and Sciences	2,381,899	10,650,896
College of Visual and Performing Arts	0	0
Other Academic Units	672,232	1,059,179
Other University Units	1,906,600	60,951,476
 Total	 6,052,340	 80,809,838

## ACCOUNTANCY

U.S. Army Medical Department for “United States Army Medical Command (USAMEDCOM) Six Month Appointment.” Tim West.

Award: \$29,502.00.

December 1, 2010 – May 31, 2011. Research.

Funds are being used to support Professor West’s research efforts in the area of performance-based budgeting acceptance, usage and performance effects across the USAMEDCOM.

## ALLIED HEALTH AND COMMUNICATIVE DISORDER

U.S. Department of Education for “Rehabilitation of Individuals who are Deaf or Hard of Hearing.” Daniel Boutin.

Award: \$97,680.00.

October 1, 2010 – September 30, 2015. Instructional.

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

## BIOLOGICAL SCIENCES

U.S. Department of the Interior for “Annual Census of Lake Erie Watersnakes.” Richard King.

Award: \$50,000.00 (Cumulative Award: \$128,668.00).

September 18, 2007 – September 30, 2012. Research.

Funds continue 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.

U.S. Fish and Wildlife Service/U.S. Department of the Interior for “Predicting Climate Change-Induced Distributional Shifts in Great Lakes Region Reptiles.” Richard King.

Award: \$34,755.00.

October 1, 2010 – September 30, 2012. Research.

Funds are being used (1) to study the degree to which reptile distributions in the Great Lakes region are associated with climatic variables and (2) to use this information to identify the future location of climatically suitable areas under existing climate change models.

## CAMPUS CHILD CARE

DeKalb County Community Foundation for “Laptop Computers for the Preschool Classrooms at Campus Child Care.” Lisa Schmidt.

Award: \$2,400.00.

October 28, 2010 – October 27, 2011. Public Service.

Funds are being used for NIU’s Campus Child Care Center to obtain laptop computers for the classroom in its center in order to improve the documentation and child assessment procedures.

## CENTER ON CHILD WELFARE AND EDUCATION

School Association for Special Education in DuPage County for “FY11 Project CHOICES/Early CHOICES.” Angela Baron-Jeffrey/Lemuel Watson.

Award: \$260,208.00

July 1, 2010 – June 30, 2011. Public Service.

Funds are being used to assist school districts to increase the capacities of districts and educational personnel to educate and provide supports and services to children and youth with disabilities in the preschool, school, and community environments.

## CHEMISTRY AND BIOCHEMISTRY

OcuMetrics, Inc. for “System for Ocular Oxygen Measurements.” Elizabeth Gaillard.

Award: \$58,000.00.

September 30, 2010 – September 29, 2011. Research.

Funds are being used to study and characterize probes in terms of penetration into various compartments in the eye.

Argonne National Laboratory for “New Materials for Energy Efficiency and Environmental Applications.” Tao Xu.

Award: \$8,413.00 (Cumulative Award: \$23,471.00).

January 1, 2010 – June 30, 2011. Research.

Funds continue being used to prepare, characterize and improve new fuel cell materials that can be used as low cost electrode catalysts, novel adsorbent and catalyst for CO<sub>2</sub> removal, and new materials for other energy efficiency and environmental application.

## COLLEGE OF ENGINEERING AND ENGINEERING TECHNOLOGY

American Foundry Society, Inc. for “Advanced Titanium Casting Solutions.” Joseph Santner/Federico Sciammarella.

Award: \$94,512.00.

October 19, 2010 – October 18, 2011. Research.

Funds are being used to make improvements to inexpensive cast titanium alloy processes using the induction Skull Melting system at Rock Island Arsenal and a new alloy being developed by QuesTek Innovations LLC.

U.S. Department of Defense (Rock Island Arsenal) for “Manufacturing and Engineering Advisory and Assistance Services.” Joseph Santner/Alan Swiglo/Richard Johnson.

Award: \$60,000.00 (Cumulative Award: \$150,000.00).

June 29, 2010 – June 27, 2011. Research.

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)

Illinois State Board of Education for “Emerging Technologies Institute: Preparing Teachers and Students for the Future.” Mansour Tahernezehadi/Promod Vohra.

Award: \$250,000.00 (Cumulative Award: \$415,950.00).

May 1, 2010 – September 30, 2011. Instructional.

Funds continue to be used to conduct an emerging technologies summer workshop for teachers in the West Aurora, Rockford, Harlem, and Rich Township School Districts.

#### COLLEGE OF LIBERAL ARTS AND SCIENCES/CENTER FOR GOVERNMENTAL STUDIES

Cook County Department of Public Health for “Suburban Cook County BRFS.” Cynthia Nelson/Sherrie Taylor.

Award: \$163,983.00

August 1, 2010 – July 31, 2011. Public Service.

Funds are being used to provide reliable information about the health status and health needs of adult household residents of Cook County who live outside of Chicago.

#### COLLEGE OF LIBERAL ARTS AND SCIENCES/MECHANICAL ENGINEERING/WOMENS STUDIES/GEOGRAPHY

National Science Foundation for “Navigate, Balance and Retain: Developing Success in Mid-Career for Female STEM Faculty.” Christopher McCord/Brianno Coller/Amy Levin/Lesley Rigg.

Award: \$161,284.00.

September 1, 2010 – August 31, 2012. Academic Support.

Funds are being used to collect data for a full proposal submission to the ADVANCE program.

#### DIVISION OF RESEARCH AND GRADUATE STUDIES, DEAN’S OFFICE

XL Academics for “Enhancing the XL Academic Website.” Bradley Bond.

Award: \$600.00.

November 15, 2010 – December 5, 2010. Academic Support.

Funds were used to support a graduate student to update and enhance XLA’s website.

Illinois Board of Higher Education for “2010-2011 DFI Fellowships.” Lisa Freeman.  
Award: \$6,400.00 (Cumulative Award: \$188,000.00).  
July 1, 2010 – June 30, 2011. Academic Support.

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

### ELECTRICAL ENGINEERING

Engineering Information Foundation for “Designing the Female-Friendly “Introduction to Engineering Course” for Expanding Women’s Opportunities in Engineering.” Lichuan Liu.  
Award: \$15,444.00.

July 1, 2011 – June 30, 2012. Research.

Funds will be used to encourage NIU to teach introductory engineering courses in ways more amenable to women’s learning styles, and yet in ways that equal or exceed the rigor of the traditional courses using UEET 101 as a prototype, they will revise the learning materials and teaching strategies to these ends. Results will be evaluated and disseminated to other departments and universities.

### GENERAL ADMINISTRATION

American Physical Society for “NIU’s LaserFest on the Road.” Patricia Sievert.

Award: \$5,000.00.

December 15, 2009 – December 31, 2010. Public Service.

Funds will be used to construct and bring hands-on explorations of laser light to students and community members throughout northern Illinois.

### GEOLOGY AND ENVIRONMENTAL GEOSCIENCES

Alfred E. Alquist Seismic Safety Commission for “Concurrent Investigation of Seismic Hazards of the Lake Tahoe Basin: Dive Test in Support of the Whillans Ice Stream Subglacial Access Research Drilling (WISSARD) Project.” Ross Powell.

Award: \$49,660.00.

October 1, 2010 – June 1, 2011. Research.

Funds are being used to support test dives of a new, custom-built remotely operated vehicle (ROV) in Lake Tahoe in order to gather data that may help fill gaps in knowledge about the history and evolution of the Lake Tahoe Basin and add to the understanding of seismic, seiche and landslide hazard potential in the basin.

## GEOLOGY AND ENVIRONMENTAL GEOSCIENCES/ELECTRICAL ENGINEERING

National Science Foundation for “Southern Ocean Diatom Taphonomy and Paleoproductivity: A Laboratory Study of Silica Degradation and Export.” Reed Scherer/Michael Haji-Sheikh.  
Award: \$209,914.00.

December 15, 2010 – November 30, 2012. Research.

Funds are being used to investigate the dissolution of diatoms through studying cultures of selected Southern Ocean species. The data generated will be used to develop a taphonomic model for diatom silica that can improve assessments of paleoproductivity and surface water chemistry reconstruction based on samples found in drill cores.

## HISTORY

Council for International Exchange of Scholars for “Fulbright Fellowship: Class, Gender, Nation, and the Regulation of Prostitution in the Austrian Fin de Siecle.” Nancy Wingfield.  
Award: \$20,940.00.

September 1, 2010 – December 31, 2010. Research.

Funds are being used to support travel to and living expenses in Ukraine while on fellowship.

## INDUSTRIAL ENGINEERING

Caterpillar, Inc. for “Design for Manufacturability.” Omar Ghrayeb/Jenn-Terng Gau.  
Award: \$76,813.00.

September 16, 2010 – May 15, 2011. Research.

Funds are being used to work on Caterpillar, Inc.’s Design for Manufacturability (DFM) project, which is a means of proactively addressing product issues early in the design cycle.

Caterpillar, Inc. for “Simulation in Process Improvement at CAT.” Omar Ghrayeb/Reinaldo Javier Moraga.

Award: \$76,813.00.

September 16, 2010 – May 15, 2011. Research.

Funds are being used to develop simulation models with Caterpillar, Inc. in order to evaluate the current system and propose alternatives for process improvements.

Caterpillar, Inc. for “Mixed Model Assembly Line Balancing for LWL at Caterpillar.” Omar Ghrayeb/Purushothaman Damodaran.

Award: \$76,813.00.

September 16, 2010 – May 15, 2011. Research.

Funds are being used to balance the large wheel loader (LWL) assembly/fab. Lines at the Caterpillar Aurora facility and thereby increase the capacity of the line.

Suncast Corporation for “Developing Standard Operating Procedures and Process Improvements.” Omar Ghrayeb/Purushothaman Damodaran.

Award: \$53,824.00.

December 18, 2009 – May 15, 2011. Research.

Funds are being used to assist the sponsor in the manufacturing of new products, including requirements definition, creation of standard operating procedures, design layouts, and optimization.

### MATHEMATICAL SCIENCES

University of Minnesota for “Sabbatical Support for Gerard Awanou.” Gerard Awanou.

Award: \$41,634.00.

September 1, 2010 – June 10, 2011. Research.

Funds are being used to support Professor Awanou’s residence at and participation in the scientific program at the Inst. For Mathematics and its Applications at the University of Minnesota.

### MOTORCYCLE SAFETY

Illinois Department of Transportation for “Motorcycle Safety Program.” Robert Ritter.

Award: \$1,372,156.00.

December 1, 2010 – November 30, 2011. Public Safety.

Funds are being used to conduct motorcycle safety classes.

### NORTHERN PUBLIC RADIO

Illinois State Library for “FY11 ISL – NIRIS.” Tim. Emmons.

Award: \$28,273.00.

July 1, 2010 – June 30, 2011. Public Service.

Funds are being used to provide information services to the visually impaired.

### PHYSICS

University of Notre Dame for “The Quarknet Project.” Dhiman Chakraborty.

Award: \$25,080.00.

September 1, 2010 – August 31, 2011. Public Service.

Funds are being used for participation in the Quarknet Project, a professional teacher development program launched in the mid-1990s. The goal is to involve high-school teachers and their students in state-of-the-art research that seeks to resolve some of the mysteries about the structure of matter and the fundamental forces of nature. It is a nationwide network that also provides opportunities for participating science teachers to exchange knowledge with their peers.

Muons, Inc. for “Simulation of Accelerator Based Backgrounds in a Muon Collider.” David Hedin.

Award: \$30,000.00.

June 19, 2010 – June 20, 2011. Research.

Funds are being used to fund a graduate student to develop and test code to simulate a muon beam and its decay byproducts, as a means of studying the impact of beamline components such as shielding and magnets on the rates in the detector region.

Argonne National Laboratory for “Development of Fast Imaging Cameras and the Associated Software for XPCS Measurements.” Laurence Lurio.

Award: \$17,506.00 (Cumulative Award: \$36,617.00).

June 15, 2010 – December 31, 2011. Research.

Funds continue being used to develop and test software for real time data comparison and fast processing of images using a computer cluster.

National Science Foundation for “Research in High Energy Physics: Theory and Phenomenology of Supersymmetry.” Stephen Martin.

Award: \$815.00 (Cumulative Award: \$100,815.00).

September 1, 2008 – August 31, 2011. Research.

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

Argonne National Laboratory for “Study of High Current Electron Beam Propagation Through the Argonne Wakefield Accelerator Facility.” Philippe Piot/Daniel Mihalcea/

Award: \$26,362.00.

January 4, 2011 – April 3, 2011. Research.

Funds are being used to perform detailed beam dynamics study and accelerator design for a planned upgrade to the Argonne Wakefield Accelerator facility.

Northeastern University for “Building a Unified Computational Model for the Resonant X-Ray Scattering of Strongly Correlated Materials.” Michel Van Veenendaal.

Award: \$60,280.00 (Cumulative Award: \$180,840.00).

September 1, 2008 – August 31, 2011. Research.

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

U.S. Department of Energy for “Design and Prototyping of a High Granularity Scintillator Calorimeter.” Vishnu Zutshi.

Award: \$240,000.00.

September 1, 2010 – August 31, 2011. Research.

Funds are being used to investigate and develop a prototype for a high granularity scintillator calorimeter using embedded silicon photomultipliers and multipixel photon counter photodetectors to maximize the ability to convert light energy into an electrical signal and thus improve detector sensitivity.

## PSYCHOLOGY

Educational Testing Service for “Assessing Reading for Understanding: A Theory-Based, Developmental Approach.” Keith Millis/Katja Wiemer-Hastings.

Award: \$199,037.00.

July 1, 2010 – June 30, 2015. Research.

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.

Illinois Department of Children and Family Services for “Integrated Assessment Program.” Gregg Waas.

Award: \$919,010.00 (Cumulative Award: \$3,054,509.00).

July 1, 2010 – June 30, 2011. Public Service.

Funds continue being used to provide clinical screening and assessment services to children and adults served by IDCFS in Fiscal Year 11.

School District #427, Sycamore for “Psychology Graduate Externship – Sycamore School District.” Gregg Waas/Michelle Demaray/Christine Malecki.

Award: \$10,613.00.

August 16, 2010 – May 15, 2011. Instructional.

Funds are being used to support a psychology graduate student and two faculty supervisors to conduct an externship at Sycamore School District.

Exceptional Children Have Opportunities (ECHO) for “ECHO Psychology Externship.” Greg Waas/Michelle Demaray/Christine Malecki.

Award: \$10,613.00.

September 24, 2010 – May 15, 2011. Instructional.

Funds are being used to support a graduate student psychology externship at ECHO.

## PUBLIC OPINION LAB

Joint Commission on Accreditation of Healthcare Organizations for “Evaluating the Use of Rapid Influenza Testing in Outpatient Medical Settings.” Mindy Schneiderman.

Award: \$20,000.00 (Cumulative Award: \$89,796.00).

December 16, 2009 – December 28, 2010. Research.

Funds continue being used to conduct a survey regarding H1N1 for the Joint Commission.

## PUBLIC SAFETY

Eastern Illinois University for “NIU Alcohol Enforcement Detail.” Todd Henert.

Award: \$7,504.00.

August 15, 2010 – November 1, 2010. Public Safety.

Funds were used to conduct focused enforcement during homecoming events, at football games, and the “Greek Row” area on weekend evenings.

National Institute of Justice/U.S. Department of Justice for “NIU Police Bulletproof Vests.”

Marc Roccaforte.

Award: \$10,350.00.

April 1, 2008 – December 30, 2010. Other.

Funds continue being used to provide Public Safety with bulletproof vests.

## REGIONAL DEVELOPMENT INSTITUTE

Illinois Department of Transportation for “Northwestern Illinois Occupant Protection Resource Center.” Lisa Kaye Bergeron.

Award: \$144,517.00.

October 1, 2010 – September 30, 2011. Public Service.

Funds are being used to support projects aimed at increasing safety belt use among teens, minorities, and rural populations.

Illinois Department of Commerce and Economic Opportunity for “NIU-IMEC Multi-Company Training Grant.” John Lewis.

Award: \$338,800.00.

July 1, 2009 – December 31, 2010. Public Service.

Funds continue to be used to support job training and/or re-training for employees of multiple Illinois companies.

## STATISTICS

Abbott Laboratories Fund for “Support for Linear and Nonlinear Mixed Models and Their Applications to Clinical Data.” Balakrishna Hosmane.

Award: \$24,000.00 (Cumulative Award: \$60,000.00).

April 1, 2007 – December 31, 2012. Research.

Funds continue being used to provide consultive assistance to statisticians at Abbott Laboratories in the application of linear and nonlinear mixed mixed models to clinical data of interest to the sponsor.

## STUDENT SUPPORT SERVICES

U.S. Department of Education for “Student Support Services for Northern Illinois University.” Jerry Wright.

Award: \$360,858.00.

September 1, 2010 – August 31, 2015. Academic Support.

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.

## UNIVERSITY LIBRARIES

Illinois Reading Council for “Starting Ahead, Staying Ahead: Developing Hispanic Children’s Early Literacy Skills through Continuous Parental Home Involvement.” Ladislava Khailova.

Award: \$750.00.

December 1, 2010 – November 30, 2011. Public Service.

Funds are being used to extend last year’s “Off to a Good Start” project by offering 3 interconnected, 90-minute, family literacy workshops to approximately 15 Hispanic families with children ages birth-five.

## WOMEN’S RESOURCE CENTER

DeKalb County Community Foundation for “Young Women’s Leadership Program.” Suzanne Dunlap.

Award: \$1,500.00.

November 1, 2010 – October 31, 2011. Public Service.

Funds are being used to enhance existing collaborative projects with the DeKalb School District, specifically the annual Leadership Summit with 8<sup>th</sup> graders, and the Young Women Leaders Mentoring Program with 7<sup>th</sup> grade girls.

U.S. Department of Justice for “Northern Illinois University Coordinated Community Response Project.” Jill Dunlap/Katharine Schaab.

Award: \$299,724.00.

October 1, 2010 – September 30, 2013. Student Services.

Funds are being used to reduce crimes of sexual assault, domestic and dating violence, and stalking on campus.