NORTHERN ILLINOIS UNIVERSITY  
OFFICE OF SPONSORED PROJECTS  

SUMMARY OF GRANT/CONTRACT AWARDS – FISCAL YEAR 2015  

January 1, 2015 – March 31, 2015  

<table>
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<tr>
<th>Source</th>
<th>THIS REPORT</th>
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<td>State of Illinois</td>
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<td><strong>23,653,507</strong></td>
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<td><strong>Total</strong></td>
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ANTHROPOLOGY

Award: $88,509.00.

This project studies the long-term social, cultural, and political impact of international NGO aid in eight rural areas in Haiti, and includes a field school for U.S. graduate students and a NGO Summer Institute and research methods seminar.

BIOLOGICAL SCIENCES

Friends of Nachusa Grasslands for "Impacts of bison on dung beetle community assembly in restored and remnant tallgrass prairies." Nicholas Barber.
Award: $750.00.

This research project seeks to understand how bison, through their potential indirect effects on arthropod communities, influence ecosystem-level processes such as nutrient cycling.

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: $14,703.00. (Cumulative $60,703.00).

The purpose of this project is 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.

Lake County Forest Preserve District for "Ecological Assessment of District Lands." Richard B. King/Holly Jones/Nicholas Barber.
Award: $40,663.00.

The purpose of the project is to provide field data collection and reporting and assessment of the presence of fauna species in multiple forest preserves throughout Lake County.

National Institutes of Health/DHHS for "Orphan genes in pathogenic bacteria." Yin, Yanbin.
Award: $373,400.00.

This proposal focuses on studying ORFans that occur in pathogenic bacteria infecting humans, which will benefit further studies leading to potential diagnostic markers, drug targets and vaccines for the treatment/prevention of pathogenic diseases.

Iowa State University for "Hybrid Processing for Robust Production of Biorenewable Fuels and Chemicals." Shengde Zhou.
Award: $4,510.00. (Cumulative $13,314.00).
The purpose of this project is to provide expertise to Iowa State University in the lactic-acid producing biocatalyst.

CENTER FOR GOVERNMENTAL STUDIES


The proposed project will fund development of a new Community Economic Development Strategy for a newly defined Region of Boone, Winnebago, and McHenry Counties.

CENTER FOR NON-GOVERNMENTAL LEADERSHIP AND DEVELOPMENT


This project will gauge the impact of and facilitate data-driven decision making regarding programmatic offerings by the DeKalb County Nonprofit Partnership, and will generate data which can be used by NIU faculty for broader research endeavors.

CENTER FOR SOUTHEAST ASIAN STUDIES

Department of State for "FY2014 Southeast Asia Youth Leadership Program: Nurturing a New Generation of Citizen Activists and Community Leaders in ASEAN." Judy Ledgerwood/Maria Nihei. Award: $490,000.00. (Cumulative $980,000.00). January 1, 2016 - December 31, 2016. (Other Sponsored Activities) Public Service.

The goal of this project is to plan and conduct an exchange program that brings 60 youth and adult participants from Southeast Asia to NIU.

COLLEGE OF ENGINEERING & ENGINEERING TECH, DEAN'S OFFICE


The purpose of this project is to improve UTC Aerospace Systems' capability to perform circuit modeling, simulation, and circuit design for induced lightning transient for pin injection susceptibility.

COLLEGE OF LIBERAL ARTS AND SCIENCES, DEAN'S OFFICE

Illinois Department of Public Health for "Illinois County Behavioral Risk Factor Surveys (ICBRFS)." Cynthia Nelson/Agesilaos C.Vasilopoulos.
Award: $2,400,000.00.

The purpose of this project is for data collection, data management, reporting and technical support on the Illinois County Behavioral Risk Factor Surveys.

Award: $351,076.00.

The major goal of this project is to collect and process data for the Illinois Behavioral Risk Factor Surveillance System in service to the Illinois Department of Public Health.

COMMUNICATION

Award: $6,912.00. (Cumulative $6,912.00).

The goals of this project are create a white paper, develop a list of policymakers, create a digital magazine, and other promotional efforts aimed at addressing issues of healthcare for transgender people, especially in communication practices

ELECTRICAL ENGINEERING

Invictus Medical, Inc. for "Wireless Communication Integrated Active Noise Reduction System." Liu, Lichuan.
Award: $129,999.00.

The purpose of this project is to significantly reduce the noise level inside infant incubators by using an active noise reduction approach.

FAMILY, CONSUMER AND NUTRITION SCIENCES

Award: $20,100.00.

The purpose of this project is to provide support for the Northern Illinois Food Bank (NIFB) related to research and nutrition education program implementation.

INDUSTRIAL AND SYSTEMS ENGINEERING

Award: $128,909.00. (Cumulative $250,136.00).
The overall objective of this project initiative is to conduct time studies, balance the line, and reduce process inefficiencies for K-series wheel loader assembly lines.


The purpose of this project is to characterize the difference in WBV exposure and physiological responses and subjective comfort between an industrial standard (Gammer seat) and new suspension technology (BoseRide seat).


The purpose of this project is to model different areas related to one of CAT's Aurora facilities in order to identify different factors affecting total cycle time and work-in-process inventory.

**LITERACY AND ELEMENTARY EDUCATION**


The goal of the project is to improve the English skills of 65 Ecuadorian teachers participating in ELS courses and workshops during an 8 month period on the NIU campus.

**MECHANICAL ENGINEERING**


Funds are requested to evaluate the feasibility of launching a national chain of retail Tinkering Lab locations where girls and boys can build exciting science and "Maker" projects using 21st century fabrication tools.


Evaluation of air cooling effectiveness in an annular rotating flow channel via testing and data analysis over a range of operating conditions. Final test report will be prepared.

Namiki Precision Jewel Co., Ltd. for "Testing Project for Namiki Precision." Federico Sciammarella. Award: $2,750.00.

This project will demonstrate LAM effectiveness and basic characteristics (Silicon nitride).

MOTORCYCLE SAFETY

Illinois Department of Transportation for "FY 2015 Motorcycle Safety Project." Scott Haas, Mary Strub.
Award: $1,494,076.00.
December 1, 2014 - November 30, 2015. (Instructional Programs) Instructional Programs.

Funds will be used to conduct motorcycle rider education safety courses.

MUSIC

The Civic Orchestra for "Graduate Assistantship, viola." Janet Hathaway.
Award: $5,106.00.

This project provides a valuable experiential learning opportunity, in which the student will assist with coaching undergraduate student chamber ensembles, assist string faculty with researching repertory, and performing in the NIU Philharmonic Orchestra.

NORTHERN PUBLIC RADIO

Corporation for Public Broadcasting for "FY15 Community Service Grant." Staci Hoste.
Award: $240,835.00.
October 1, 2014 - September 30, 2016. (Other Sponsored Activities) Public Service.

Funds are being used to support high quality public programming.

PHYSICS

Award: $49,917.00. (Cumulative $468,278.00).

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

Award: $99,833.00. (Cumulative $468,278.00).

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

Fermi National Accelerator Laboratory for "Joint Appointment NIU/FNAL." Swapan
Chattopadhyay.
Award: $138,951.00.
September 1, 2014 - August 31, 2015. (Other Sponsored Activities) IPA or Joint Appointment.

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.

Department of Energy for "Nonlinear Dynamics & Phase Space Manipulations of High-Brightness Beams." Bela Erdelyi/Philippe R. Piot.
Award: $100,000.00. (Cumulative $200,000.00).

The project consists of two research thrusts: (1) production, phase-space manipulations, and applications of high-brightness electron beams and (2) computational beam and accelerator physics at the intensity frontier.

Fermi National Accelerator Laboratory for "Support for Steven Boi." David R. Hedin.
Award: $28,535.00.

The purpose of this project is to provide support for undergraduate Physics student, Steven Boi's, participation on the Mu2e experiment at Fermi.

Fermi National Accelerator Laboratory for "Development of the MU2E Preliminary Design." David R. Hedin/Nicholas Pohlman.
Award: $2,518.00. (Cumulative $305,042.00).

The purpose of this project is to support NIU's role in developing the Muon Beamstop, SiPM Characterization, and design of the Upstream Extinction Monitor.

Fermi National Accelerator Laboratory for "Development of the MU2E Preliminary Design." David R. Hedin/Nicholas Pohlman/Vishnu Zutshi.
Award: $48,052.00. (Cumulative $305,042.00).

The purpose of this project is to support NIU's role in developing the Muon Beamstop, SiPM Characterization, and design of the Upstream Extinction Monitor.

Argonne National Laboratory for "Fabrication and characterization of superconducting nanostructures." Zhili Xiao.
Award: $47,402.00.

Funds are being used to develop approaches to probe the effect of an array of artificial defects on a superconductor.

PSYCHOLOGY
Award: $2,876,534.00. 

Funds will be used to provide clinical screening and assessment services to children and adults served by Illinois DCFS in Fiscal Year 2015.

Award: $30,444.00. (Cumulative $121,776.00). 

The purpose of this project is to support a psychology graduate student externship with Joliet School District.

Sheltered Village, Inc. for "Psychology Graduate Externship at Sheltered Village." Greg Waas/Holly K. Orcutt. 
Award: $20,668.00. (Cumulative $82,672.00). 
July 1, 2015 - June 30, 2016. (Instructional Programs) Instructional Programs.

Funds will be used to support a psychology graduate extern and clinical supervisor at Sheltered Village.

DeKalb County Court Services for "Psychology Externship at DeKalb County Court Services." Greg Waas/Alan Rosenbaum. 
Award: $21,408.00. (Cumulative $85,632.00). 
July 1, 2015 - June 30, 2016. (Instructional Programs) Instructional Programs.

Funds will be used to support a psychology graduate externship at DeKalb County Court Services.

Award: $15,437.00. 
October 1, 2014 - September 30, 2015. (Instructional Programs) Instructional Programs.

The purpose of this project is to support the integration of "Ready to Learn" elements into NIU educator preparation programs.

Award: $69,292.00. 

This research will investigate social sources that may increase or reduce workplace telepressure in technology-mediated work environments and its effects on employee and organizational performance and health indicators.
Award: $12,314.00. (Cumulative $65,964.00).
July 1, 2015 - June 30, 2016. (Instructional Programs) Instructional Programs.
Funds will be used to support a psychology graduate extern and faculty clinical supervisor.

PUBLIC ADMINISTRATION

Village of Itasca for "Administrative Intern." Denise Burchard.
Award: $19,800.00.
The purpose of this project is to provide a valuable experiential learning opportunity to a graduate student in NIU's MPA program.

SOCIOLOGY

Award: $5,000.00.
This qualitative study explores the factors that shape individuals' use of petitionary prayer and the strategies that those individuals use to justify their belief in the efficacy of prayer.

STATISTICS

Award: $39,700.00.
The purpose of this project is to provide biostatistics support to the Metropolitan Water Reclamation District of Greater Chicago.

Award: $34,179.00. (Cumulative $229,079.00).
The purpose of this project is 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.

SURVEY RESEARCH TEAM

University of Minnesota for "Chicago Longitudinal Survey." Minday Schneiderman.
Award: $49,999.00.
The purpose of the project is to conduct follow up interviews as part of a University of
THEATRE AND DANCE

Department of State for "SummerNITE's MARAT/SADE in Adana. Turkey." Alexander Gelman.
Award: $30,800.00.
March 1, 2015 - June 1, 2015. (Other Sponsored Activities) Public Service.

This project will fund travel to Adana, Turkey to re-stage NIU's MARAT/SADE production.

UNIVERSITY LIBRARIES

National Endowment for the Humanities/National Foundation on the Arts and Humanities for "From Theory to Practice: Extending the Reach of Digital Power Preservation Workshops." Drew E. VandeCreek/Lynne Thomas.
Award: $195,000.00.
January 1, 2015 - December 31, 2016. (Other Sponsored Activities) Public Service.

This project offers 6 one-day workshops across the United States, providing at least 150 archivists and librarians with intensive, practical hands-on skills for translating digital preservation and curation theory into actual practices.

Award: $3,500.00.

This project will develop and nationally distribute an annotated bibliography featuring over 150 K-12 book titles focused on the experiences of immigrant children in the United States.