



# Board of Trustees

Research and Innovation,  
Legal and Legislative Affairs  
Committee

*November 10, 2022*

**BOARD OF TRUSTEES OF NORTHERN ILLINOIS UNIVERSITY**  
**Research and Innovation, Legal and Legislative Affairs Committee**  
**9:30 a.m. – Thursday – November 10, 2022**  
**Board of Trustees Room**  
**315 Altgeld Hall**

**AGENDA**

1. Call to Order and Roll Call
2. Verification of Quorum and Appropriate Notification of Public Meeting
3. Meeting Agenda Approval.....*Action*..... i
4. [Review and Approval of Minutes of August 18, 2022](#) .....*Action*..... 1
5. Chair's Comments/Announcements
6. Public Comment\*
7. University Reports
  - a. [Sponsored Program Administration Quarterly Report](#) ..... *Information*.....4
  - b. [State Legislative Report](#) ..... *Information*.....20
  - c. [Federal Legislative Report](#) ..... *Information*.....21
  - d. [U.S. Geological Research Partnership](#) ..... *Information*.....23
  - e. [Sustainability Report](#)..... *Information*.....25
8. Other Matters
9. Next Meeting Date
10. Adjournment

\*Individuals wishing to make an appearance before the Board should consult the [Bylaws of the Board of Trustees of Northern Illinois University](#), Article II, Section 4 – *Appearances before the Board*. Appearance request forms can be completed [online](#) in advance of the meeting or will be available in the Board Room the day of the meeting. For more information contact Crystal Doyle, ccoppel@niu.edu, Recording Secretary to the Board of Trustees, Altgeld Hall 300, DeKalb, IL 60115, 815-753-1273.

**Anyone needing special accommodations to participate in the NIU Board of Trustees meetings should contact Crystal Doyle, ccoppel@niu.edu or (815) 753-1273, as soon as possible.**

Minutes of the  
**Board of Trustees of Northern Illinois University**  
**Research and Innovation, Legal and Legislative Affairs**  
**Committee Meeting**  
August 18, 2022

**CALL TO ORDER AND ROLL CALL**

The meeting was called to order at 9:30 a.m. by Committee Chair Veronica Herrero in the Board of Trustees Room, 315 Altgeld Hall. Recording Secretary Jessica Cima conducted a roll call of the Trustees.

Committee Vice Chair Rita Athas: Present     Trustee Dennis Barsema: Present  
Trustee John Butler: Present                     Trustee Montel Gayles: Present  
Trustee Tim Moore: Present                     Trustee Bob Pritchard: Present  
Board Chair Eric Wasowicz: Absent             Committee Chair Veronica Herrero: Present

Also present were President Lisa Freeman; Committee Liaison and Vice President for Research and Innovation Partnerships Gerald Blazey; Vice President and General Counsel and Board Parliamentarian Bryan Perry; Chief of Staff and Liaison to the Board of Trustees Matt Streb; Director of State Relations Katie Davison; and Assistant Vice President for Research and Sponsored Programs Dara Little.

**VERIFICATION OF QUORUM AND APPROPRIATE NOTICE OF PUBLIC MEETING**

General Counsel Bryan Perry indicated the appropriate notification of the meeting had been provided pursuant to the Illinois Open Meetings Act. Mr. Perry also advised that a quorum was present.

**MEETING AGENDA APPROVAL**

Committee Chair Herrero asked for a motion to approve the meeting agenda. Trustee Gayles so moved, and Trustee Barsema seconded. The motion was approved.

**REVIEW AND APPROVAL OF MINUTES**

Committee Chair Herrero asked for a motion to approve the minutes of May 12, 2022. Trustee Barsema so moved, and Committee Vice Chair Athas seconded. The motion was approved.

**CHAIR'S COMMENTS/ANNOUNCEMENTS**

Committee Chair Herrero noted the start of the 2022-2023 academic year and congratulated faculty on the continued strong growth of sponsored funding and the Office of Sponsored Programs Administration for supporting the growth. Committee Chair Herrero reported that Governor Pritzker's office has included the NICCS project in their bulletin for RFPs.

**PUBLIC COMMENT**

Committee Chair Herrero introduced the public comment portion of the meeting. General Counsel Bryan Perry confirmed that no public comments were received.

## UNIVERSITY REPORTS

Committee Chair Herrero asked Vice President for Research and Innovation Partnerships Dr. Gerald C. Blazey, to provide an update from the Division of Research and Innovation Partnerships. Dr. Blazey reported that Luke Sebby recently departed RIPS but will continue to work with the division on many initiatives as the Executive Director for Strategic Initiatives with the NIU Foundation. Dr. Blazey reported that Karinne Bredberg is now the Director of Innovation and brings a wealth of experience facilitating and developing partnerships. Dr. Blazey reported that the State Capital Development Board (CDB) is moving forward with the NICCS project, and that the consultant RFP has closed and the CDB is now in the selection process. Dr. Blazey reported that the NIU Press had re-established publication numbers to the standard prior to the movement of operations in FY20. Dr. Blazey provided a brief federal relations update, noting NIU's success with Congressionally Directed Spending as both Senator Durbin and Representative Underwood are supporting equipment upgrades for the Microchip Research and Development lab in the College of Engineering and Engineering Technology. Dr. Blazey reported on the passage of the CHIPS + Science Act, which provides significant funding for both domestic chip production and for science agencies, particularly NSF and DOE. Dr. Blazey noted that NIU made significant contributions to the legislations, particularly through the work of Dr. Anna Quider, who over a two-year period, conceived and directed a sustained advocacy program to broaden scientific participation in the legislation. Dr. Quider successfully advocated for a legislative definition of emerging research institutions, or ERIs, and creation of a program to promote collaboration between flagship universities and ERIs like NIU.

### **Agenda Item 7.a. State Legislative Report**

Ms. Katie Davison, Director of State Relations provided the State Legislative Report, noting that state capital projects are moving forward. Specifically, the Illinois Innovation Network hub, the Northern Illinois Center for Community Sustainability, which were both approved to solicit proposals from architecture and engineering firms through the Capital Development Board. Ms. Davison reported that The Illinois Board of Higher Education has been convening the Commission on Equitable Public University Funding, of which President Freeman is a member, to develop a funding model for determining appropriations for higher education that is in alignment with its strategic plan, A Thriving Illinois. Ms. Davison reported that the spring legislative agenda will include adjustments or revisions to annual audit items that have had continuous reoccurring findings. Ms. Davison reported that the NIU caucus is considering expanding membership to legislative staff who are alumni or have connections to NIU.

### **Agenda Item 7.b. – Sponsored Programs Administration Quarterly Report**

Assistant Vice President Dara Little presented the FY22 Sponsored Funding Report, noting that in FY22 NIU received \$48M in total external funding from 371 awards, which included \$6M in COVID-19 relief funds. Ms. Little noted that absent COVID-19 relief funds, external funding has grown 11% since last year, and 39% since FY18. Ms. Little reviewed the SPA functions between proposal submission through project closeout and discussed plans for restructuring and modernization to meet the needs of the changing portfolio.

## UNIVERSITY RECOMMENDATIONS

### **Agenda Item 8.a. – Board of Trustees Bylaws Periodic Review**

Deputy General Counsel Greg Brady and NIU Legal Intern Samantha Malone presented suggested edits to the board bylaws for committee review. Ms. Malone reported that the goal of the of the board bylaws review was to update the bylaws so that they were consistent, clear, and effective.

Ms. Malone and Mr. Brady reviewed in detail their proposed edits to Article II, Section 4: Formal Presentations, Article II, Section 7: Removal from Board, Article V, Section 1: Student Member, Article V, Section 5: Elections, and Article VI, Section 1: Executive Committee. Mr. Brady noted that in addition to their initial proposed edits, the Board requested that the Office of the General Counsel review Article II, Section 4, Article V, Section 6, and Article VII. Committee Chair Herrero requested a motion to approve the amendments proposed by the Office of General Counsel. Trustee Butler moved, and Trustee Gayles seconded. The motion was approved. The committee discussed the proposed edits in detail. Following its discussion, the committee requested further edits to Article V, Section 1: Elected Officers and Terms of Office, Article IV: Open Meeting Policy, Article II, Section 4: Appearances Before the Board, Article X: Adoption, Review and Amendment of Bylaws, Article VI, Section 2.b: Academic Affairs, Student Affairs and Personnel Committee, Membership. Committee Chair Herrero requested a motion to approve the bylaws as presented with the amendments made by Mr. Brady and the additional three amendments that were presented by Trustee Gayles, Trustee Barsema, and Board Chair Wasowicz during the discussion. Trustee Butler moved, and Trustee Barsema seconded. The motion was approved. Committee Chair Herrero requested a motion to approve the bylaws with all amendments incorporated, and forward to the full Board for consideration at its next regular meeting. Trustee Barsema so moved, and Trustee Gayles seconded. The motion was approved.

#### **OTHER MATTERS**

Committee Chair Herrero asked if there were other matters to come before the Committee. The Committee confirmed that there were no other matters to be discussed.

#### **NEXT MEETING DATE**

Committee Chair Herrero noted that the next meeting will be held on November 10, 2022.

#### **ADJOURNMENT**

Committee Chair Herrero asked for a motion to adjourn. Trustee Gayles so moved, and Trustee Athas seconded. The motion was approved.

Committee Chair Herrero asked Ms. Cima to conduct a roll call vote.

Committee Vice Chair Rita Athas: Present      Trustee Dennis Barsema: Present

Trustee John Butler: Present                      Trustee Montel Gayles: Present

Trustee Tim Moore: Present                      Trustee Bob Pritchard: Present

Board Chair Eric Wasowicz: Absent              Committee Chair Veronica Herrero: Present

The motion was approved.

The meeting was adjourned at 11:21 a.m.

Jessica Cima/Crystal Doyle

Recording Secretary

*In compliance with Illinois Open Meetings Act 5 ILCS 120/1, et seq, a verbatim record of all Northern Illinois University Board of Trustees meetings is maintained by the Board Recording Secretary and is available for review upon request. The minutes contained herein represent a true and accurate summary of the Board proceedings.*

## SPONSORED PROGRAM ADMINISTRATION QUARTERLY REPORT

For the first quarter of FY23, NIU received 69 sponsored awards totaling \$17.1M (\$3.6M in research, \$2.9M in instruction, and \$10.6M in other sponsored activities (OSA)). See Figure 1. This includes \$1.7M in COVID funding (\$1.7M in instruction and \$36K in OSA). Funding for this same period, including COVID funding, is up 111% (research -18%, instruction 459%, and OSA 237%) over last year. Funding without COVID is up 105%.<sup>1</sup>

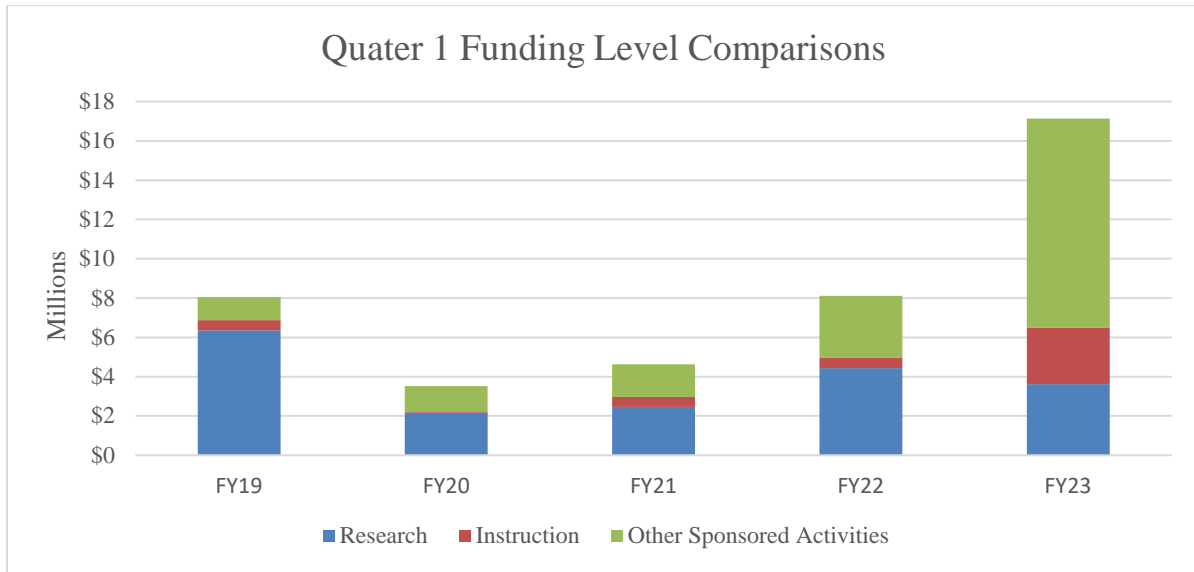
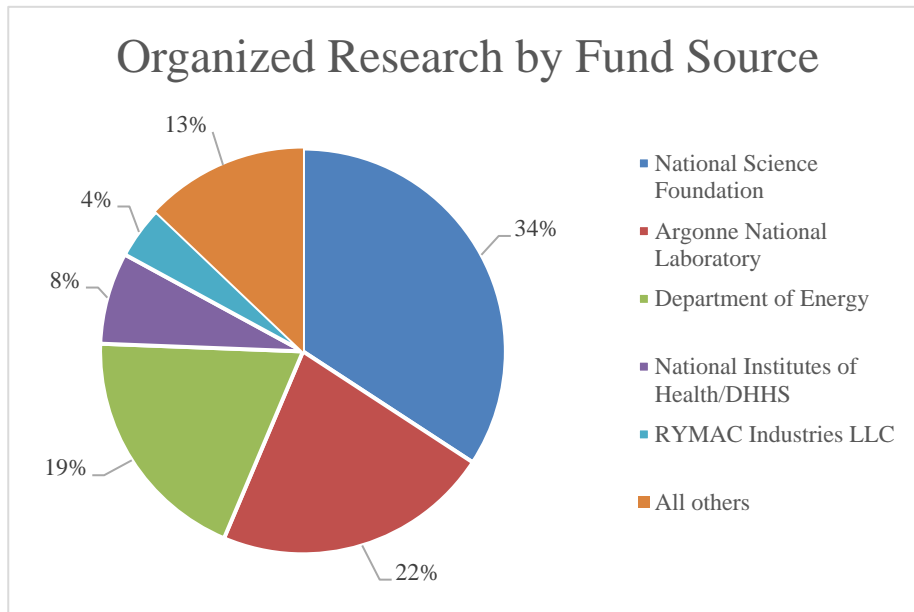


Figure 1



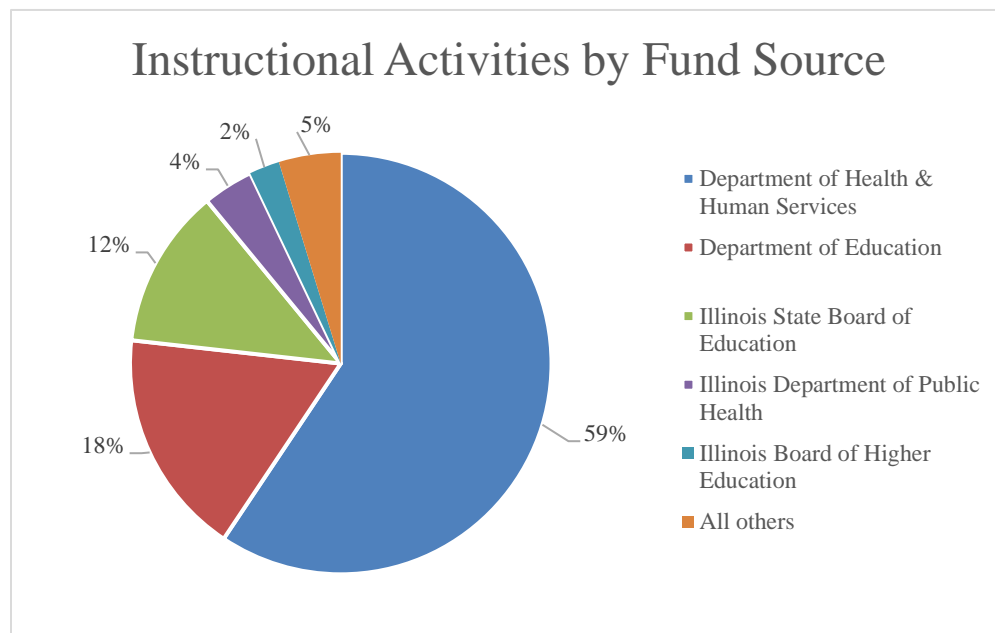
The National Science Foundation (NSF) (34%) and Argonne National Laboratory (22%) provided over half of this quarter’s funding for organized research. (Figure 2) Funding from the NSF supported projects in the Department of Chemistry and Biochemistry and the Department of Earth, Atmosphere and Environment.

Figure 2

Note: Other category includes agencies contributing 1%-3% of the total.

<sup>1</sup> FY22 Qtr. 1 COVID funding \$604K, FY21 Qtr. 1 COVID funding \$75K.

Four of the NSF projects were competitive collaborative research projects jointly pursued with researchers from other institutions, including Columbia University, Virginia Tech, and North Carolina State. Contracts from Argonne National Laboratory are providing funding for joint researcher appointments for the upcoming academic year and stipends for graduate research assistants in the departments of Chemistry and Biochemistry, Computer Science, Earth, Atmosphere and Environment, Mechanical Engineering, and Physics. Faculty in Physics and Mechanical Engineering were also the recipients of direct research funding from the U.S. Department of Energy.

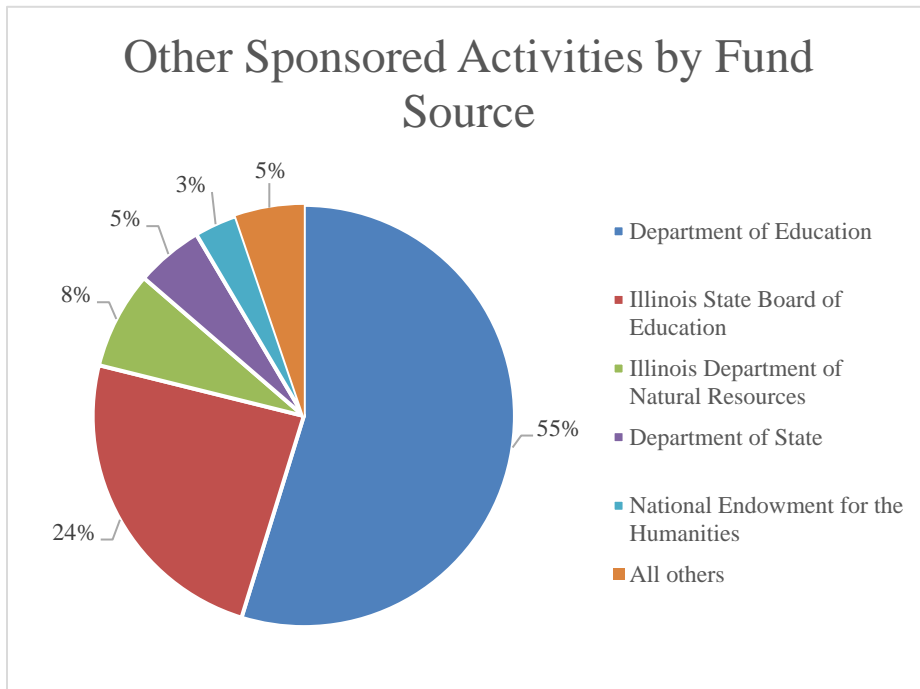


Funding from three sponsors (U.S. Department of Health & Human Services (DHHS), U.S. Department of Education, and Illinois State Board of Education) accounted for almost all funding for this quarter's instructional activities. (Figure 3) COVID relief funds from the DHHS passed through from the Illinois Board of

**Figure 2**

*Note: Other category includes agencies contributing 1%-2% to the total.*

Higher Education to NIU will fund a program through the College of Education to provide streamlined paths to degrees, licenses, and credentials to the early childhood incumbent workforce as part of a statewide initiative to establish the Early Childhood Access Consortium for Equity. Funding from the U.S. Department of Education will support three projects across campus; in the School of Family & Consumer Sciences funds will be used to enhance cohesive and comprehensive early learning opportunities for preschoolers in the DeKalb community; faculty in the Department of Psychology will recruit, train, and graduate 12 school psychology and 12 special educator scholars with specialized interdisciplinary training in addressing bullying with expertise in applied behavior analysis; and faculty in Department of Special and Early Education are continuing their work to train graduate students as special education teachers and orientation and mobility specialists.



**Figure 3**

*Note: Other category includes agencies contributing 1%-2% to the total.*

Funding across colleges and other university units reflects an increase in awards secured for activities that do not fall under research or instruction and are often public service and outreach programs (Figure 4). Most of the OSA funding this quarter was from the U.S. Department of Education or Illinois State Board of Education and span three large awards. These three contract awards provide support for the Illinois Interactive Report Card

and ISBE Data Warehouse programs, both of which are coordinated through the Division of Outreach, Engagement, and Regional Development P-20 Initiatives Network. Funding from the Illinois Department of Natural Resources provides reimbursement to NIU’s Institute for the Study of Environment, Sustainability and Energy to assist the agency with managing the Open Space Lands Acquisition and Development Act (OSLAD) grant program.

Across colleges, several had significant increases this quarter. See Table 1 on the following page. The College of Education increased the amount awarded compared to the first quarter of FY22 by 2200% due to the \$1.7M award from the Illinois Board of Higher Education mentioned previously. The Division of Outreach, Engagement, and Regional Development increased the amount awarded compared to the first quarter of FY22 by 550% because of the three ISBE awards mentioned previously. The College of Engineering and Engineering Technology increased the amount awarded compared to the first quarter of FY22 by 279% by securing fourteen awards totaling \$636K with most of these awards for organized research.



**Table 1**

<b>College</b>	<b>Organized Research</b>	<b>Instructional Activities</b>	<b>Other Sponsored Activities</b>	<b>FY23 - 1st Qtr. Totals</b>	<b>FY22 - 1st Qtr. Totals</b>	<b>% Change</b>
Business	\$ -	\$ -	\$ -	\$-	\$1	<b>0%</b>
Education	\$10,789	\$ 1,956,689	\$180,000	\$2,147,478	\$ 93,372	<b>2200%</b>
Engineering & Engineering Technology	\$605,307	\$ 30,800	\$ -	\$ 636,107	\$167,940	<b>279%</b>
Health and Human Sciences	\$27,728	\$ 517,650	\$ -	\$545,378	\$600,099	<b>-9%</b>
Law	\$ -	\$ -	\$ -	\$-	\$-	<b>0%</b>
Liberal Arts & Sciences	\$2,975,568	\$ 250,000	\$1,648,903	\$4,874,471	\$4,975,106	<b>-2%</b>
Visual & Performing Arts	\$ -	\$ -	\$9,500	\$9,500	\$20,456	<b>-54%</b>
Outreach, Engagement and Regional Development	\$ -	\$ -	\$8,369,988	\$8,369,988	\$1,287,387	<b>550%</b>
Other Academic Units	\$ -	\$ 119,341	\$ 398,920	\$ 518,261	\$ 360,433	<b>44%</b>
Other University Units	\$ -	\$ -	\$ 36,000	\$ 36,000	\$ 604,859	<b>-94%</b>
<b>Total</b>	<b>\$3,619,393</b>	<b>\$2,874,480</b>	<b>\$10,643,311</b>	<b>\$17,137,184</b>	<b>\$8,109,655</b>	<b>111%</b>

A full listing of all sponsored awards received for this quarter follows.

**ANTHROPOLOGY**

*Primate Conservation, Inc. for "Rapid Assessment of the Energetic Condition of Wild Diademed Sifaka: Validating Non-Invasive Assays of Fecal Thyroid Hormone for Future Conservation Applications." Casey M Farmer/Mitch Irwin.*

Award: \$3,250.00.

May 16, 2022 - May 15, 2023. (Organized Research) Applied Research.

This project seeks to validate a commercial T3 radioimmunoassay in wild diademed sifaka (*Propithecus diadema*), the first validation for a wild strepsirrhine population.

**ART MUSEUM**

*Illinois Arts Council for "Art Museum Support." Josephine E Burke.*

Award: \$9,500.00.

October 1, 2022 - August 31, 2023. (Other Sponsored Activities) Other.

This award will support ongoing exhibits and operating costs for the NIU Art Museum.

## **CAREER SERVICES**

***Illinois Board of Higher Education for "Northern Illinois University FY23 Cooperative Work Study." Catherine W Doederlein.***

Award: \$50,000.00.

July 1, 2022 - August 31, 2023. (Other Sponsored Activities) Public Service.

The purpose of the project is to provide valuable career-related work experiences to students that are applicable to their fields of study.

## **CENTER FOR SOUTHEAST ASIAN STUDIES**

***Office of Postsecondary Education/Department of Education for "2022 Foreign Language and Area Studies Fellowships (FLAS)." Judy L Ledgerwood.***

Award: \$291,148.00.

August 15, 2022 - August 14, 2023. (Other Sponsored Activities) Other.

Funds will be used to support six graduate FLAS fellows and four undergraduate FLAS fellows during the academic year and five graduate fellows and four undergraduate fellows for summer study.

***Bureau of Educational and Cultural Affairs/Department of State for "Southeast Asia Youth Leadership Program 2022-2025." Judy L Ledgerwood.***

Award: \$550,000.58.

September 17, 2022 - September 30, 2025. (Other Sponsored Activities) Public Service.

This project will fund 60 students from ASEAN nations visiting the US and learning about civic engagement and good governance.

## **CHEMISTRY AND BIOCHEMISTRY**

***Directorate for Mathematics and Physical Sciences/NSF for "Mechanistic and Exploratory Photochemistry with Plane-Polarized Light." Evgueni E Nesterov.***

Award: \$258,098.00.

July 1, 2022 - June 30, 2025. (Organized Research) Basic Research.

The proposal's focus is on studying control of photochemical reactions in anisotropically aligned photochemically reactive molecules using plane-polarized light.

***National Science Foundation/NSF for "Collaborative Research: Understanding the Reversible Formation of Sodium Hydrosulfide in Hybrid Electrolytes for High-Energy Density Storage." Tao Li.***

Award: \$282,020.00.

October 1, 2022 - September 30, 2025. (Organized Research) Applied Research.

The primary goal of the project is to usher a new paradigm of sodium-sulfur redox chemistry based on the reversible formation of sodium hydrosulfide in the hybrid organic-aqueous electrolyte to enhance the energy density of Na/S storage.

***Argonne National Laboratory for "University to Argonne Joint Appointment - Tao Li AY 22-23." Tao Li.***

Award: \$88,335.00.

August 16, 2022 - May 15, 2023. (Organized Research) IPA or Joint Appointment.

The purpose of these funds is to support a joint appointment for Dr. Tao Li with Argonne National Laboratory.

***National Science Foundation/NSF for "Collaborative Research: Rational Design of Ni/Ga Intermetallic Compounds for Efficient Light Alkanes Conversion Through Ammonia Reforming." Tao Li.***

Award: \$282,721.00.

October 1, 2022 - September 30, 2025. (Organized Research) Applied Research.

The research will test a proposed concept that could allow lower cost, CO<sub>2</sub>-free hydraulic fracturing for the energy industry, which could have major industrial applications and play a pivotal role in ensuring a clean, secure, and affordable energy future.

***Argonne National Laboratory for "Electrode Surface Protection by Self-Assembled Monolayers (SAM) for Lithium Battery FY23." Tao Xu.***

Award: \$33,617.00.

September 1, 2022 - August 31, 2023. (Organized Research) Applied Research.

The goal is to achieve cycling stable artificial interfaces through the design of self-assembled monolayers (SAM) using fluorocarbon-based molecules.

***Argonne National Laboratory for "Development of Energy Efficient Oxide Materials - GRA Support (six months)." Tao Xu.***

Award: \$16,800.00.

September 2, 2022 - March 8, 2023. (Organized Research) Applied Research.

The purpose of this funding is to support a GRA to develop a scaled continuous flow hydrothermal synthesis reactor technology that can synthesize thermochromic M-phase VO<sub>2</sub> nanoparticles with size < 50 nm and yield at the level of kg/day.

***University of Iowa for "Discovery and Development of Antifungal Acetyl CoA Synthetase Inhibitors." Timothy J Hagen.***

Award: \$249,093.00.

July 1, 2022 - June 30, 2023. (Organized Research) Applied Research.

Our goal is to identify a lead ACS inhibitor scaffold along with a back-up series for further pre-clinical development as broad-spectrum antifungal drug candidates.

***Argonne National Laboratory for "Advanced Electrolyte and Materials for Li-ion Batteries." Yingwen Cheng.***

Award: \$17,450.63.

August 1, 2022 - July 31, 2023. (Organized Research) Basic Research.

The goal of this project is broadly defined as developing advanced electrode and electrolyte materials for stable cycling of Li-ion batteries.

***Argonne National Laboratory for "Elucidating Electrochemical Interface via Single Crystal Electrochemistry." Yingwen Cheng.***

Award: \$38,995.70.

September 1, 2022 - August 31, 2023. (Organized Research) Basic Research.

This position is primarily defined within the Lead Battery Science Research program, where the project is intended to understand at atomic levels the fundamental limits of lead-acid battery technology and its electrochemical processes.

#### **COLLEGE OF EDUCATION**

***Illinois Board of Higher Education for "Early Childhood Access Consortium for Equity Grant (ECACE)." Laurie A Elish-Piper.***

Award: \$1,706,689.00.

August 1, 2021 - June 30, 2024. (Instructional Programs).

The purpose of the project is to provide streamlined paths to degrees, licenses, and credentials to the early childhood incumbent workforce as part of a statewide initiative to establish the Early Childhood Access Consortium for Equity.

#### **COLLEGE OF ENGINEERING AND ENGINEERING TECHNOLOGY**

***Milwaukee Tool for "Additional Material and Prototype Testing (Phase 3)." Donald R Peterson/Simon Kudernatsch.***

Award: \$6,672.42.

August 16, 2022 - September 15, 2022. (Other Sponsored Programs) Technical Testing.

NIU will conduct the BS EN ISO 10819 testing on all prototyped glove samples provided to them. These prototyped glove samples will be the confidential and proprietary designs of Milwaukee Tool.

#### **COLLEGE OF HEALTH AND HUMAN SCIENCES**

***Illinois Department of Public Health for "IDPH Pipeline Program - 2023." Michael R Kushnick.***

Award: \$111,584.00.

July 1, 2022 - May 31, 2023. (Instructional Programs).

This project will connect socio-economically underrepresented minority students with knowledge and resources to promote public health, experience community public health needs, and support the students as they complete their degrees.

#### **COMPUTER SCIENCE**

***Argonne National Laboratory for "High Performance Computing Research FY23." Michael E Papka/Joseph Insley.***

Award: \$90,156.00.

August 16, 2022 - August 15, 2023. (Organized Research) Basic Research.

The Subcontractor shall work as a member of the appropriate Argonne Leadership Computing Facility (ALCF) group. The work will be primarily done remotely from the NIU campus during school year and at Argonne National Laboratory during the breaks.

***Office of Naval Research/DoD for "Automated Evolution of the Software Robustness Through Patternizing Attack-and-Defend Semantic, Structural, and Functional Co-Evolution." Mona Rahimi.***

Award: \$120,092.00.

July 1, 2022 - June 30, 2025. (Organized Research) Applied Research.

The goal is to develop automated evolutionary techniques between pairs of software artifacts in response to software's internal changes, as well as malicious and non-malicious external changes of the software's operational environment.

***Argonne National Laboratory for "University to Argonne Joint Appointment - Brian Toonen." Nicholas T. Karonis/Joseph Insley/Michael E. Papka.***

Award: \$5,912.08.

July 1, 2022 - June 30, 2023. (Organized Research) IPA or Joint Appointment.

Funds are being used to support a joint appointment between NIU and Argonne National Laboratory for Mr. Brian Toonen.

### **COUNSELING AND HIGHER EDUCATION**

***University of Florida for "Equitable Higher Education Funding in Illinois." Xiaodan Hu.***

Award: \$10,789.74.

May 4, 2022 - November 30, 2022. (Organized Research) Applied Research.

The project aims to build on current research and practices on topics of higher education funding models, providing empirical support for The Partnership for College Completion (PCC) to foster an equitable approach to state funding allocations.

### **ENGINEERING TECHNOLOGY**

***Lawrence Berkeley National Laboratory for "Higher Education ISO 50001 Course Development Scope of Work for Educators." Kevin B Martin.***

Award: \$14,283.00.

August 1, 2022 - October 31, 2022. (Organized Research) Basic Research.

The purpose of this research is to develop ISO 50001 educational material for higher education and expand adoption of the material with engineering students and possibly other academic fields.

***Lawrence Berkeley National Laboratory for "Higher Education ISO 50001 Course Development Scope of Work for Educators." Kevin B Martin.***

Award: \$2,399.04.

August 1, 2022 - January 31, 2023. (Organized Research) Basic Research.

The purpose of this research is to develop ISO 50001 educational material for higher education and expand adoption of the material with engineering students and possibly other academic fields.

***Illinois Innovation Network for "AI and Vision Enabled Plant Health Monitoring System in Vertical Farms." Kevin B Martin/Pratool Bharti.***

Award: \$16,560.00.

September 1, 2022 - August 31, 2023. (Organized Research) Applied Research.

This project aims to develop a machine learning based growth environmental management system.

***RYMAC Industries LLC for "Producing Polymer Composites from Hemp Residues." Mahdi Vaezi.***

Award: \$151,283.04.

July 1, 2022 - December 31, 2023. (Organized Research) Applied Research.

The goal is to conduct a series of experimental studies in NIU Plastics Laboratory to produce bioplastics using hemp residues.

### **ENVIRONMENTAL STUDIES**

*Illinois Department of Natural Resources for "Open Space Lands Acquisition and Development Act Grant Program." Thomas S Skuzinski.*

Award: \$794,089.00.

July 1, 2022 - June 30, 2023. (Other Sponsored Activities) Public Service.

Funds will be used under this Intergovernmental Agreement to assist the Illinois Department of Natural Resource in reviewing applications for the Open Space Lands Acquisition and Development Act (OSLAD) grant program.

### **FAMILY AND CONSUMER SCIENCES**

*Illinois State Board of Education for "NIU Preschool for All Expansion." Thomas W Pavkov.*

Award: \$352,949.00.

July 1, 2022 - June 30, 2023. (Instructional Programs).

This project will enhance cohesive and comprehensive early learning opportunities for preschoolers in the DeKalb community.

### **EARTH, ATMOSPHERE, AND ENVIRONMENT**

*Directorate for Geosciences/NSF for "Collaborative Research: North American Warm-season Extremes in a Changing Climate: Large-scale Drivers and Local Feedbacks." Allison C Michaelis.*

Award: \$397,337.00.

September 1, 2022 - August 31, 2025. (Organized Research) Applied Research.

Dr. Michaelis will contribute her expertise in high-resolution numerical modeling and analysis of dynamical processes related to summertime weather extremes.

*National Aeronautics & Space Administration/NASA for "Testing Early Mars Climate From Global Spatial Distribution of Valley Network Geomorphology." Wei Luo.*

Award: \$111,662.00.

July 1, 2022 - June 30, 2023. (Organized Research) Basic Research.

The goal of this project is to test which climate scenario on early Mars is most consistent with the spatial distribution of valley network geomorphology (e.g., Hack's law exponent, basin hypsometry, circularity, and valley depth) on a global scale.

*Columbia University for "Post Expedition Award for Justin Dodd's Participation on IODP Expedition 395C." Justin P Dodd.*

Award: \$17,999.00.

August 1, 2022 - July 31, 2023. (Organized Research) Applied Research.

To test hypotheses about the geochemical evolution of fluid-rock interactions in basalt and

overlying marine sediments, and the timing of plume-influenced changes in North Atlantic Deep-Water formation/circulation and global biogeochemical cycling.

## **GRADUATE SCHOOL**

***Waubonsee Community College for "Graduate Student Placement at Waubonsee Community College FY23 (Student Life)." Kerry K Wilks.***

Award: \$33,735.00.

August 1, 2022 - May 15, 2023. (Instructional Programs).

This project provides three graduate research assistants to Waubonsee Community College to work under the Dean of Students in the area of Student Life.

***Waubonsee Community College for "Graduate Student Placements at Waubonsee Community College FY23-Triumph." Kerry K Wilks.***

Award: \$18,606.00.

July 1, 2022 - May 31, 2023. (Instructional Programs).

Funds will be used to support a graduate student who will work with the Dean for Students Office at Waubonsee Community College.

***Illinois Board of Higher Education for "Diversifying Higher Education Faculty in Illinois (DFI) FY2023." Kerry K Wilks.***

Award: \$67,000.00.

July 1, 2022 - June 30, 2023. (Instructional Programs).

NIU will administer grants awarded by the DFI Program Board to fellows at NIU under the DFI program.

## **INDUSTRIAL AND SYSTEMS ENGINEERING**

***Illinois Innovation Network for "Data-Driven Process Modeling of Advanced Manufacturing System." Niechen Chen.***

Award: \$15,000.00.

July 1, 2022 - June 30, 2023. (Organized Research) Applied Research.

Funds will be used to establish a general, adaptable data-driven process modeling paradigm that will enable system-wide dynamic control and efficient manufacturing scale-up without losing quality, thus sustaining Illinois's advanced manufacturing industry.

***AGCO Corp. for "Improving Warehouse Operations." Purushothaman Damodaran.***

Award: \$93,487.00.

September 1, 2022 - August 31, 2023. (Organized Research) Applied Research.

Funds will be used to improve warehouse inbound and warehouse operations to enhance productivity.

***Suncast Corporation for "Lean Six Sigma Workshops." Purushothaman Damodaran.***

Award: \$15,000.00.

July 1, 2022 - June 30, 2023. (Instructional Programs).

***Various and Corporate Sponsors for "Lean Six Sigma Workshops." Purushothaman***

***Damodaran.***

Award: \$15,800.00.

July 1, 2022 - June 30, 2023. (Instructional Programs).

***Southern Illinois University at Edwardsville for "iGAIT: A Data-Driven Application to Predict Autism Spectrum Disorder (ASD) Index for Children Living in Underserved, Underrepresented, and Low-income Communities." Ziteng Wang/Milijana Buac/Allison L Gladfelter.***

Award: \$16,683.56.

August 1, 2022 - July 31, 2023. (Organized Research) Applied Research.

Funds will be used to create a low-cost data-driven application to predict the ASD index for children living in underserved and low-income communities using a smartphone camera.

***University of Illinois System for "Shielding the Future: Next-generation Network Design for Strategic Deployment of Testing Capabilities and Logistics Resources of SHIELD Illinois." Ziteng Wang.***

Award: \$29,659.00.

June 29, 2022 - June 29, 2024. (Organized Research) Applied Research.

The goal is to optimize the next generation of SHIELD Illinois' testing and logistics network in support of their strategic planning to better serve the State of Illinois.

**KINESIOLOGY AND PHYSICAL EDUCATION**

***Illinois Department of Juvenile Justice for "Fitness Leadership Experience (FLEX)." Jennifer M Jacobs/Zachary Wahl-Alexander.***

Award: \$180,000.00.

July 15, 2022 - June 30, 2023. (Other Sponsored Activities) Public Service.

The purpose of the program is to establish mentoring relationships at a youth center to provide educational programming that promotes fitness and health.

**MECHANICAL ENGINEERING**

***General Motors Company for "Fuel Cell R&D for Heavy-Duty Applications Low-Cost, Durable Bipolar Plates." Jenn-Terng Gau.***

Award: \$199,097.00.

January 1, 2022 - September 30, 2023. (Organized Research) Applied Research.

The major goal is to develop a robust and cost-effective manufacturing process and sequence to forming fuel cell bipolar plates for heavy-duty applications.

***University of Illinois System for "Sustainable Software for Sustainable Manufacturing: Developing and Training of Open-Source High Performance Computing Simulation Tools for Additive Manufacturing." Jifu Tan.***

Award: \$15,000.00.

August 1, 2022 - July 31, 2023. (Organized Research) Applied Research.

Funds will be used to develop open-source high performance computing simulation tools for additive manufacturing and provide training on high performance computing for future workforce development and local small and mid-sized manufacturers.



***Argonne National Laboratory for "ANL-Graduate Visiting Student (Francis Kim)." Sahar Vahabzadeh.***

Award: \$45,183.22.

August 1, 2022 - July 31, 2023. (Organized Research) Basic Research.

Funds will be used to support a graduate research assistant who will interact with Argonne research staff to execute experiments in support of DOE funded programs. The work conducted at Argonne will be part of the student's PhD dissertation.

## **NORTHERN PUBLIC RADIO**

***Corporation for Public Broadcasting for "2022 Community Service Grant." Staci Hoste.***

Award: \$237,579.00.

October 1, 2021 - September 30, 2023. (Other Sponsored Activities) Public Service.

Funds are used to support high quality public programming.

***Illinois Arts Council for "WNIJ-FM PRTV Operating Grant Summer 2022 WNIJ-FM." Staci Hoste.***

Award: \$10,390.00.

June 20, 2022 - August 31, 2022. (Other Sponsored Activities) Other.

These funds will enable the people of Illinois to have access to locally operated Public Radio and Television stations that provide unique services to their communities, including local productions, arts programming, education outreach, local & regional.

***Illinois Arts Council for "IACA WNIU-FM PRTV Basic Grant FY23." Staci Hoste.***

Award: \$9,420.00.

October 1, 2022 - August 31, 2023. (Other Sponsored Activities) Public Service.

Funds are used for high quality public radio programming.

***Illinois Arts Council for "IACA WNIJ-FM PRTV Basic Grant FY23." Staci Hoste.***

Award: \$9,420.00.

October 1, 2022 - August 31, 2023. (Other Sponsored Activities) Public Service.

Funds are used for high quality public radio programming.

## **PHYSICS**

***Argonne National Laboratory for "University to Argonne Joint Appointment - Andreas Glatz AY 22-23." Andreas Glatz.***

Award: \$67,715.00.

August 16, 2022 - May 15, 2023. (Organized Research) IPA or Joint Appointment.

The purpose of these funds is to support a joint appointment for Dr. Andreas Glatz with Argonne National Laboratory.

***Department of Energy for "Nonlinear Dynamics of Integrable Hamiltonian Systems for Novel Particle Accelerators in High Energy Physics." Bela Erdelyi.***

Award: \$210,000.42.

July 1, 2022 - June 30, 2023. (Organized Research) Basic Research.

The project will undertake a comprehensive investigation of the dynamics of nonlinear integrable Hamiltonian systems for particle accelerators in high energy physics, with a special emphasis on the Integrable Optics Test Accelerator (IOTA) at Fermilab.

***Office of Science/Department of Energy for "Illuminating Neutrinos with the DUNE Experiment." Mike Eads.***

Award: \$265,000.00.

April 1, 2022 - March 31, 2023. (Organized Research) Basic Research.

This project will design and build the photon detectors for the Deep Underground Neutrino Experiment (DUNE) to explore tau neutrinos, extending our understanding of the fundamental particles that comprise the universe and their interactions.

***Argonne National Laboratory for "Synthesis, Single Crystal Growth and Diffraction Studies of Multiferroic and Functional Oxides FY23." Omar H Chmaissem.***

Award: \$28,681.38.

September 1, 2022 - August 31, 2023. (Organized Research) Applied Research.

This project focuses on the synthesis & characterization of functional oxides with emphasis on multiferroic manganites and superconducting nickelates. Materials created under this proposal have and continue to be studied using advanced neutron scattering.

***Argonne National Laboratory for "Structural Investigations of Advanced Functional Materials using Neutron and X-ray Scattering." Omar H Chmaissem.***

Award: \$41,346.87.

October 1, 2022 - September 30, 2023. (Organized Research) Basic Research.

This project is to support the research and supervision activities of NIU's Professor Omar Chmaissem within the Neutron and X-ray Scattering (NXRS) Group of the Materials Science Division.

***Argonne National Laboratory for "University to Argonne Joint Appointment - Philippe Piot AY 22-23." Philippe Piot.***

Award: \$87,576.00.

August 16, 2022 - May 15, 2023. (Organized Research) IPA or Joint Appointment.

The purpose of these funds is to support a joint appointment for Dr. Philippe Piot with Argonne National Laboratory.

***Argonne National Laboratory for "Application of Machine Learning to Particle-Accelerator Control." Philippe Piot.***

Award: \$34,869.00.

June 16, 2022 - May 15, 2023. (Organized Research) Applied Research.

Funds will be used to support a graduate student who will work on the Application of Machine Learning to Particle-Accelerator Control.

***Argonne National Laboratory for "Development of a Damping-Ring-Free Electron Injector for Future Linear Colliders." Philippe Piot.***

Award: \$5,809.00.

September 1, 2021 - August 31, 2022. (Organized Research) Basic Research.

The purpose of the project is to finalize the conceptual design of a GeV-class electron injector capable of attaining electron bunch with the required properties without having to rely on the currently envisioned 6-lm-long damping ring parameters.

***Argonne National Laboratory for "University to Argonne Joint Appointment - Xueying Lu AY 22-23." Xueying Lu.***

Award: \$71,054.00.

August 16, 2022 - May 15, 2023. (Organized Research) IPA or Joint Appointment.

The purpose of these funds is to support a joint appointment for Dr. Xueying Lu with Argonne National Laboratory.

***Argonne National Laboratory for "University to Argonne Joint Appointment - Zhili Xiao AY 22-23." Zhili Xiao.***

Award: \$134,111.00.

August 16, 2022 - May 15, 2023. (Organized Research) IPA or Joint Appointment.

The purpose of these funds is to support a joint appointment for Dr. Zhili Xiao with Argonne National Laboratory.

## **PRECOLLEGIATE-UPWARD BOUND**

***Office of Postsecondary Education/Department of Education for "Student Support Services Program - Regular." Felicia R Bohanon.***

Award: \$261,888.00.

September 1, 2022 - August 31, 2023. (Other Sponsored Activities) Student Service.

The primary purpose of this award is to provide services to low-income, first-generation and/or disabled students to foster flexible and affordable paths to obtaining knowledge and skills in college.

## **PRESIDENTS OFFICE**

***DeKalb County Health Department for "NIU COVID-19 Hotline with DeKalb County Health Department." Matthew J Streb.***

Award: \$36,000.00.

April 1, 2022 - June 30, 2022. (Other Sponsored Activities) Public Service.

NIU will manage COVID-19 hotline including providing recommendations for testing, isolation, quarantine and return to campus.

## **PSYCHOLOGY**

***National Institute of Mental Health/NIH/DHHS for "Mitigating Risk From Macroeconomic Stress on Child Mental Health." Liz Shelleby.***

Award: \$15,867.00.

November 1, 2021 - October 31, 2022. (Organized Research) Applied Research.

This project will examine the potential for ParentCorps, a school-based preventive intervention

found to promote positive parenting and child mental health, to buffer the effects of macroeconomic shock on children's mental health and family adjustment.

***Office of Special Education and Rehabilitative Services/Department of Education for "Project Prevent and Address Bullying Behavior at All Tiers (PPABB)." Michelle Demaray/Jesse W. Johnson/Christine E. Malecki/Julia A. Ogg.***

Award: \$250,000.00.

October 1, 2022 - September 30, 2023. (Instructional Programs).

This project will recruit, train, and graduate 12 school psychology and 12 special educator scholars with specialized interdisciplinary training in addressing bullying with expertise in applied behavior analysis.

## **PUBLIC ADMINISTRATION**

***Chicago State University for "Advancing Adaptive Lifelong Digital Literacy and Inclusion in Chicago's South Side." Thomas S Skuzinski/Gregory T Kuhn.***

Award: \$13,665.69.

January 1, 2022 - December 31, 2022. (Other Sponsored Activities) Public Service.

NIU-CSU collaboration centers public libraries & university students as critical intermediaries in addressing the digital divide in northeastern IL. Includes: digital navigator pilot; strategic plan; prototype geographic information system (GIS).

## **REPORT CARDS**

***Illinois State Board of Education for "Illinois Interactive Report Card FY23." Alan D. Clemens.***

Award: \$2,565,000.00.

July 1, 2022 - June 30, 2023. (Other Sponsored Activities) Public Service.

Innovation and improvement for FY23 in the MyllRC (Illinois Interactive Report Card) data portal with respect to continuous Improvement planning and 21st Century CLC benchmarking tools.

***Illinois State Board of Education for "ISBE Data Warehouse." Alan D. Clemens.***

Award: \$5,276,291.40.

July 1, 2022 - June 30, 2027. (Other Sponsored Activities) Public Service.

Provision of professional staff for the completion of ISBE data warehouse services.

## **SCHOOL OF HEALTH STUDIES**

***National Institute of Food and Agriculture/Department of Agriculture for "Reaching Out to Advance Diversity in Science (ROADS): Constructing Rural and Underserved Pathways to Careers in Food, Agriculture, Consumerism Technology and Sciences (FACTS)." Henna Muzaffar.***

Award: \$53,117.00.

September 1, 2022 - August 31, 2024. (Instructional Programs).

Project will recruit rising 11th and 12th grade students of underrepresented and first-generation populations for a yearlong and summer experience to deepen their skills and launch them on an NIU FACTS career path.

***Northern Illinois Food Bank for "Research and Outreach at the Northern Illinois Food Bank."***

***Henna Muzaffar.***

Award: \$27,728.00.

August 15, 2022 - May 15, 2023. (Organized Research) Basic Research.

NIU will provide consultation for the Northern Illinois Food Bank related to research and nutrition education program implementations.

### **SPECIAL AND EARLY EDUCATION**

***Office of Special Education and Rehabilitative Services/Department of Education for "Project Fusion: Bringing Together Scholars in Teaching of the Visually Impaired and Orientation and Mobility Programs to Serve Children with Visual Impairments in the 21st Century Classroom." Stacy M Kelly.***

Award: \$250,000.00.

August 15, 2022 - August 14, 2023. (Instructional Programs).

The purpose of this program is to train graduate students as special education teachers and orientation and mobility specialists to serve the needs of children who are blind or visually impaired with high-intensity needs in preschool through 12th grade.

### **UNIVERSITY LIBRARIES**

***National Endowment for the Humanities/National Foundation on the Arts and Humanities for "The Tousey Project." Matthew C Short.***

Award: \$348,920.00.

July 1, 2022 - June 30, 2024. (Other Sponsored Activities) Public Service.

The Tousey Project seeks to digitize and describe the dime novels of Frank Tousey, the most sensational and prolific publisher of the format.

## **STATE LEGISLATIVE REPORT**

August - October 2022

### **State Relations Engagement**

NIU presented to the Illinois Board of Higher Education (IBHE) at its annual Big Picture Meeting on October 12. IBHE had specific interest in learning about NIU's institutional equity efforts, which were outlined by President Freeman, Executive Vice President and Provost Ingram, and Vice President Jensen. A draft maintenance budget was presented by Interim Vice President and Chief Financial Officer Cofer, and an overview of facilities was provided by Associate Vice President Heckman. During the meeting, IBHE was also presented with a preliminary legislative agenda. The priorities for the 2023 spring state legislative session include the following.

- **Predictable, Adequate and Stable Funding for Operations & Capital Projects**  
We are asking the state to continue to be a partner to higher education through stable operating and capital investment.
- **Continuation of the AIM High Pilot Program**  
Our use of AIM High funding has significantly improved our ability to recruit and support a diverse population of students throughout their college experience, including students who may not have the opportunity to attend college if not for AIM high.
- **Regulatory Relief**  
We plan to continue to address the challenges surrounding procurement through further reforms building on the procurement omnibus bill that was passed last spring. Additionally, we will seek legislative relief from excessive audit items that have caused reoccurring findings.

NIU is working in partnership with our sister public universities on a joint legislative agenda that will focus on these items with possibly more included as issues arise.

### **Alumni Advocacy**

NIU hosted the "State of Advocacy" event on October 20, 2022, at NIU Naperville. Participants will learn about the partnership between the NIU Alumni Advocacy Committee and the Office of State Relations, the ways in which advocacy have proven effective in the past, and planned advocacy efforts in 2023.

### **Veto Session**

The House and Senate will convene November 15-17 and November 29-December 1, 2022, for fall veto session. No legislation impacting higher education is expected to be introduced during veto session or the possible lame duck session.

### **2022 General Election**

Election Day is Tuesday, November 8. An update on the outcomes of the election will be given at the committee meeting in an oral report.

## **FEDERAL LEGISLATIVE REPORT**

This report covers the period of May 2022 through mid-October 2022 and encompasses NIU equities across the federal government.

### **The Administration**

Dr. Arati Prabhakar was sworn in on October 1, 2022 as director of the White House Office of Science and Technology Policy (OSTP). She previously served as director of the Defense Advanced Research Projects Agency (DARPA) and National Institute of Standards and Technology (NIST). She is the first woman, first immigrant, and first person of color to serve as OSTP director.

On August 25, 2022 OSTP released a memo titled “Ensuring Free, Immediate, and Equitable Access to Federally Funded Research.” The memo requires federal research agencies to ensure open access to data and publications from federally funded research. NIU is following this closely and advocating for mitigation of negative impacts for Emerging Research Institutions (ERIs), as defined in the CHIPS and Science Act of 2022.

### **The Supreme Court**

On June 30, 2022, Justice Ketanji Brown Jackson was sworn in as a Justice of the U.S. Supreme Court. She is the first Black woman to serve on the high court.

### **U.S. Congress**

Congress passed and President Biden signed into law the CHIPS and Science Act of 2022 on August 9, 2022. This is the most significant research and development legislation in fifteen years. It includes significant authorizations for STEM research and workforce development programs, including creating an Emerging Research Institutions definition and pilot program at the National Science Foundation which NIU spearheaded. NIU is closely monitoring the implementation of this legislation and advocating for funding levels that will fully realize the legislation’s potential.

### **Appropriations**

FY23 is presently operating under a continuing resolution (CR) that expires on December 16, 2022. Whether Congress completes the FY23 appropriations process by then or pushes it into calendar year 2023 will depend on the outcome of the November elections. The House and Senate have drafted their versions of the FY23 appropriations bills, including their selected projects to receive community project funding (CPF; House) and congressionally directed spending (CDS; Senate). Among the selected CPF and CDS projects are two projects for NIU:

- \$1M from the National Institute of Standards and Technology requested by Senator Dick Durbin for the project entitled “Advanced Electronics Initiative.”
- \$1.5M from the Department of Education requested by Representative Lauren Underwood for the project entitled “Fabrication and Training Facility for Semiconductor Chips, Advanced Electronics, and Sensor Systems.”

For these projects to receive funding, FY23 appropriations legislation must pass Congress and become law.

Looking ahead to FY24, whether the House and Senate continue to fund projects through the CPF and CDS processes will likely depend upon the outcome of the November elections.

**Federal Engagement with NIU**

Upcoming federal engagements with NIU include:

- November 2 – AVP Quider is an invited panelist at the Inclusive Energy Innovation Prize Summit convened by the Office of Energy Efficiency and Renewable Energy, U.S. Department of Energy.



## **U.S. GEOLOGICAL RESEARCH PARTNERSHIP**

**Summary:** The university is working to strengthen a long-term partnership with the U.S. Geological Survey (USGS) Central Midwest Water Science Center (CMWSC) with a collaborative agreement for research and shared space on the university campus. The USGS DeKalb Field Office is interested in relocating to space previously occupied by the former NIU print shop operations. The cooperative agreement will enhance research for both CMWSC and NIU and offer increased opportunities for students and faculty. Financial, infrastructure, and schedule details for Board of Trustees consideration will be discussed at the November 10, 2022, meeting of the Finance, Audit, Compliance, Facilities and Operations Committee.

**Background:** The current motto of the USGS, "science for a changing world", is well aligned with the NIU research vision "preparing Northern Illinois and the Nation for a century of change". The USGS, a unit in the Department of the Interior, has a FY23 budget of \$1.7B and employs more than 8400 staff working at more than 400 locations nationwide. The CMWSC collects and offers information on streamflow, water quality, water-use, and groundwater data for Illinois, Iowa, and Missouri.

The USGS and NIU have a long-standing relationship encompassing research and student opportunity. Both institutions have a common interest to strengthen the connection by locating the CMWSC on the NIU campus as part of a cooperative agreement. As natural resource management and geo-environmental hazard responses become more complex, the science required to support them is becoming increasingly multi-disciplinary. The cooperative agreement will also support and promote a joint program of earth sciences research, education, and outreach. The focus on multidisciplinary research involving water will advance university goals and the mission of NICCS.

The USGS and NIU have mutual and evolving interest in cooperative research addressing issues of emerging contaminants in groundwater and surface water, numerical modeling of groundwater and surface water, application of stable isotope analysis in hydrologic studies, geophysical approaches to hydrologic studies, science communication to underserved communities, and developing instrumentation using low cost, open-source products. Current NIU academic programs and facilities will offer joint education, research, and consultation in scientific matters and participation by students and faculty. Studies within the proposed joint program include but are not limited to the disciplines of communications, geochemistry, hydrology, geology, geophysics, geospatial data, and data management. Departments and programs that will participate or have the potential to participate are Earth, Atmosphere, and Environment; Environmental Studies; Chemistry and Biochemistry; Communications; Mathematical Sciences; Statistics and Actuarial Sciences; Biological Sciences; Computer Science; and Physics. The collaboration has high potential to yield publications coauthored by NIU and USGS, to develop joint research and education proposals, co-sponsorship of scientific meetings and communication, and enhanced instructional opportunities for NIU students. Historically, the collaboration between the USGS and NIU has resulted in students and graduates transitioning to long-term USGS scientists and employee positions. Currently, the CMWSC employs three NIU interns and five NIU graduates.

The collaboration between USGS and NIU will greatly benefit the research and academic mission of NIU. Financial, infrastructure, and schedule details for Board consideration will be discussed at

the November 10, 2022, meeting of the Finance, Audit, Compliance, Facilities and Operations Committee.

## **SUSTAINABILITY REPORT**

**Summary:** The university must address and prepare for climate change to fulfill its academic, research and outreach missions. NIU has an opportunity to better serve our students and community as we embrace best practices in sustainability and work towards sustainable economic development, environmental justice, and protection of the natural environment. NIU has completed baseline assessments of sustainability, such as a greenhouse gas inventory, and is now prepared to create a formal sustainability and climate action plan for the university. The planning taskforce will propose concrete goals for creating a more sustainable campus and tie our climate action planning process to a “net zero” goal and date. The taskforce will also integrate sustainability planning into the master planning framework for the university. A draft plan is expected early in 2023 and will then be presented for public comment and revised. We anticipate having a final plan by late 2023.

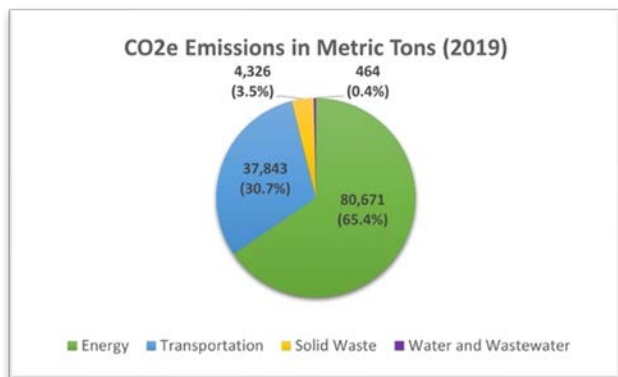
**Background:** Addressing and preparing for climate change is essential for NIU to continue to be able to fulfill its mission as a leader in education, research, and outreach. There is global consensus that climate change, pollution, and biodiversity loss are serious and defining challenges of the 21<sup>st</sup> century and will increasingly impact our daily lives. The climate crisis is already having significant impacts on communities globally. Rising temperatures are driving increases in extreme and hazardous weather, natural disasters, food and water insecurity, environmental degradation, sea level rise, economic disruptions, migrations, and conflict. Illinois is not immune to these risks, and the cost of unmitigated climate change will be high.

The situation compels action, but also presents an exciting opportunity for institutions of higher education to lead the global sustainability transformation. By prioritizing campus sustainability, NIU joins a growing global movement of colleges, corporations, nonprofits, and governments focused on sustainable economic development, social equity and environmental justice, and protection of the natural environment. We also have an opportunity to learn from best practices in sustainability that have been developed at other universities, and to share these best practices with the broader northern Illinois community.

Campus sustainability is an increasingly important factor in students’ choice of schools. The Princeton Review’s most recent College Hopes and Worries survey (2022) showed that 74% of students applying to colleges say that a college’s environmental commitment would affect their decision about which school to attend. The current generation of college students is dealing with great uncertainty about their future in a world that is heavily impacted by climate change and other social and environmental crises. They are also a generation that is deeply committed to social and environmental justice. NIU has an important opportunity to recruit committed, high achieving students who care about environmental sustainability. We can also engage more deeply with our current students by using our campus as a living laboratory for students to be involved in sustainability initiatives at NIU.

Campus sustainability encompasses a wide range of priorities, including climate action planning, sustainable building design, management of grounds, sustainable transportation, waste management and recycling, and other operational activities. It equally includes ensuring diversity and equity amongst students and staff, prioritizing mental health and wellness, an emphasis on shared governance, and a strong focus on integrating the principles of sustainability into teaching,

research, and engagement. NIU is committed to transformative change to protect our future as an institution, and the communities that we serve.



As illustrated in the figure, this past year we completed the first [greenhouse gas inventory](#) for the university. Greenhouse gas inventories are tools used to quantify annual emissions, and to serve as a baseline against which future reduction efforts can be measured. This data will guide our approach to identifying science-based reduction targets and high impact actions to prioritize in our goal of achieving carbon neutrality. Because energy (electricity and natural gas) and transportation constitute the majority of NIU’s carbon

emissions, climate action planning will be focused on reductions in these key areas.

In June 2022, NIU became a signatory to the [Second Nature Carbon Commitment](#), a part of the Climate Leadership Network. Signatories commit to a formal process of climate action planning with the goal of achieving carbon neutrality as soon as is feasible, in line with the science-based targets of the Intergovernmental Panel on Climate Change (IPCC). In becoming a signatory, NIU joins a [large network](#) of peer institutions that are committed to serving as leaders in climate action.

NIU’s strong diversity, equity and inclusion programs demonstrate our firm commitment to the success of our students who come from diverse communities and socioeconomic backgrounds. A significant number of our students come from communities in Illinois that have a long history of environmental injustices, and that are already being adversely affected by changing weather patterns tied to anthropogenic climate change. When NIU commits to addressing climate change by reducing greenhouse gas emissions, we also demonstrate our commitment to social and environmental justice, and we prioritize the future of our students and the communities we serve.

Finally, NIU is now a member of the Association for the Advancement of Sustainability in Higher Education ([AASHE](#)) and is nearing completion of our first Sustainability Tracking, Assessment, and Rating System ([STARS](#)) inventory. The STARS inventories allow campuses to self-assess current sustainability activities in a range of categories and earn credit, resulting in a rating of bronze, silver, gold, or platinum. In addition to allowing benchmarking against other institutions, STARS is an excellent tool for identifying gaps in current sustainability practices and for identifying best practices that can be implemented to improve sustainability at NIU.

NIU is now preparing to develop a comprehensive sustainability and climate action plan that recommends specific policies and actions to achieve sustainability in all aspects of NIU’s operations. The Sustainability and Climate Action Planning (SCAP) Taskforce will help to create NIU’s first campus-wide sustainability and climate action plan, which will propose concrete goals for creating a more sustainable campus and tie our climate action planning process to a “net zero” goal and date. The taskforce will also work to integrate sustainability planning into the master planning framework for the university.

The taskforce will be guided by a steering committee composed of senior administrators, and a working committee will develop the details of the plan. The recommendations and language in the plan will be developed collaboratively, and input will be sought from other university committees, task forces, and governance groups as relevant. A draft plan is expected early in 2023 and will then be presented for public comment and revised. We anticipate having a final plan by late 2023.