

TO CREATE

A BETTER TOMORROW

IT TAKES RESEARCH



RESEARCH AND SPONSORED PROGRAMS
OFFICE OF ACADEMIC AFFAIRS
2022 - 2023



TAKING

THUNDEROUS STEPS

TOWARD THE
FUTURE

The pursuit, advancement, and application of knowledge—the lifeblood of universities big and small—is essential to the success of Purdue University Fort Wayne, northeast Indiana, and beyond. Fueled by external funding, faculty and student research studies push the bounds of knowledge.

The benefits of externally funded research are vast. Discoveries from research projects lead to innovation, improve society, and support business and industry. These research projects connect the university with the community and the world, laying the groundwork for immediate and future improvements. Students who take part in experiential-learning opportunities help increase the university's rates of engagement, retention, and graduation. Research projects also create different teaching opportunities, expanding the learning experience for students and improving the community as a whole.

Mitigating a Decline: Getting Youth Excited About College

RONALD S. FRIEDMAN, DEAN OF THE COLLEGE OF SCIENCE AND PROFESSOR OF CHEMISTRY

A decrease in the high school population inevitably leads to a decline in college and university enrollment. That's what's expected to happen in Indiana in the coming years. In response, Lilly Endowment Inc. established the Youth Programs on Campus grant program, an initiative aimed at exposing youth to universities and colleges in an effort to excite them and prepare them for college.



Always eager to get more youth excited about the prospect of college life, Ronald Friedman, dean of the College of Science and professor of chemistry, jumped at the opportunity to submit a proposal for the grant program. As a result, Purdue Fort Wayne was awarded \$150,000, which Friedman put to use with summer camps. Four camps were held during the summers of 2022 and 2023, all of which were STEM focused.

The Department of Mathematical Sciences held a two-part camp experience for students ages 11–17. The goals were to provide campers the opportunity to develop an intuitive sense about mathematical ratios and proportions while also embedding mathematics in the creation of artwork. In the Great Windows Investigation Camp, students sketched windows from a local church and then enlarged their sketches

using various sizes of dot or grid paper. In the Architecture Initiative Camp, students visited Habitat for Humanity building sites and then generated their own floor plans leading to the building of a life-size model outline using stakes and twine. Both camps included community professionals whose expertise supported the camp projects.

The Department of Physics organized a five-day camp for students ages 13–17, who undertook independent projects with faculty members. Projects included an acoustic levitator, a spectrometer, a single photon counter, an electronic canjo, and a three-body astral simulator. Campers focused on both fundamental physics principles and experimentation while assembling circuits and optical components, engaging in computer programming, and measuring and analyzing experimental data.

The Future Leaders of Technology, Engineering, and Computer Science camp was a four-day camp in which students ages 7–11 learned about leadership skills and engineering, technology, and computer science careers. Activities were very popular and included building FM radios, mousetrap cars, and miniature solar-powered planes and cars.

The Summer Computing Camp was a five-day experience for students ages 14–18 aimed at increasing understanding of computing-related majors. Campers engaged in activities involving Python computer programming, electrical circuits, computer networks, artificial intelligence (ChatGPT), and cybersecurity. "The latter, which used the Bandit game from the site [overthewire.org](https://www.overthewire.org), was

particularly popular, and the gamification of a hacking experience really kept their attention," Friedman said. At the end of the week, teams of campers applied these skills to an Internet of Things–themed capstone project, which they presented to their peers and parents. This project allowed them to apply their knowledge of networking and security to address potential security threats within a working model of a smart home.

Through surveys completed by camp attendees, Friedman found that "campers increased their knowledge of and interest in STEM fields through the use of creative, hands-on, engaging activities." More students interested in STEM fields and our campus? We'd call that a success.

Grant Sponsor

Lilly Endowment Inc.

Camp Collaborators

Math Camp

Faculty: Sue Mau

Physics Camp

Faculty: Gang Wang, Matt Derby, Matthew Perkins Coppola, Tim Grove, Mark Masters, and Eugenio Ursino
Staff: Melissa Froderman

Future Leaders of Technology Camp

Faculty: Rebecca Essig and Kim O'Connor

Summer Computing Camp

Faculty: Thomas Bolinger, Beomjin Kim, Michelle Parker, Guoping Wang, and Matthew Perkins Coppola
Staff: Janet North





Unearthing History: Looking into Our Region's Past

JAMIE COCHRAN-SMITH, PROFESSOR OF PRACTICE, COLLEGE OF LIBERAL ARTS
ANDREW SMITH, PROFESSOR OF PRACTICE, COLLEGE OF LIBERAL ARTS

Digging up the past. Understanding history. Gaining new perspectives. It's all part of the fascinating world of archaeology, and it can happen anywhere, including our own backyard, Pokagon State Park, specifically, where Jamie Cochran-Smith and Andrew Smith, professors of practice in the Department of Anthropology, undertook a research study focused on the park. They wanted to locate archaeological sites to provide a more complete cultural history of the park. A secondary goal was to learn more about the Civilian Conservation Corps camp, which was located on the grounds between 1934 and 1942 and housed the men who built the park.

Cochran-Smith and Smith wanted to tackle this study for a few reasons. First, it's the perfect project to teach students archaeological field methods. Second, it's a high-priority research study because Indiana has been prioritizing archaeological work within its state parks. Third, they were both born, raised, and educated in northeast Indiana, so they wanted to pursue an investigation that was close to home.

The research study was ultimately a success. According to the professors, they were able to "locate 26 additional archaeological sites, both precontact and historic, within the park, giving us a better understanding of the prehistory and history of the region." This proved especially significant, as little archaeological work has been done at Pokagon. They said, "Most of the sites we located throughout the park are precontact sites, meaning before Europeans arrived in America. These sites were occupied by Native peoples."

In addition to the sites, they found artifacts, which



by the Native peoples hundreds to thousands of years ago. "Additionally, we were able to confirm historical accounts of the Civilian Conservation Corps camp at the park," they said.

The investigation was a success not only from an archaeological standpoint but also from an academic and personal one. Cochran-Smith and Smith are pleased that the "students who participated were proud to be a part of a project that contributed to the knowledge base in our region, in our state, and in our country." One of the various archaeological foci at the Purdue Fort Wayne archaeological program is cultural resource management, of which the primary objective is to learn about and preserve the past. This research study accomplished just that.

Grant Sponsor

This research activity was funded in part by a grant from the US Department of the Interior, National Park Service's Historic Preservation Fund administered by the Indiana Department of Natural Resources, Division of Historic Preservation and Archaeology, with matching funds from Purdue University Fort Wayne.

Space Junk: A New Perspective

NODIR ADILOV, DEAN OF THE DOERMER SCHOOL OF BUSINESS, PROFESSOR OF ECONOMICS, AND OUTSTANDING RESEARCH AWARD RECIPIENT

Much like we have on Earth, space has a junk problem. Space debris—leftover parts from old, nonfunctioning objects—is constantly orbiting Earth, and when it collides with functional satellites, it can wreak havoc, functionally and financially. Nodir Adilov, dean of the Doermer School of Business and professor of economics, wanted to learn more about this destruction from an economic standpoint. His project, An Economic Indicator of the Orbital Debris Environment, sought to measure the financial losses from these space collisions.

“This project was important to me because it ties together space exploration and economics, two areas that aren’t often connected but should be. As more satellites are launched, the amount of debris grows, creating risks not only for physical collisions but also for the businesses behind these satellites. I wanted to help bridge the gap between physical and economic concerns by creating a more comprehensive way to measure financial risks,” Adilov said. With data in hand, he then built an index to track the economic risks.

Space debris isn’t a static problem, it’s constantly in flux with each new satellite launch, so it was important that this project measured current risks and how they change over time. Adilov found that some areas in space are becoming “economically more dangerous faster than others.” Having this knowledge can help satellite companies and governments better plan for future space missions.

Space debris has often been seen as a physical problem because you can easily see the devastating effects of debris collisions, but this project has highlighted another critical area of this concern—financial implications—and

changed how we think about space risks. Adilov hopes this project “helps students and the community understand that we all interact with the space economy, even if we don’t realize it. For example, we rely on satellites for GPS navigation and mobile services. As space debris increases, these services could become more costly or disrupted.” He also hopes to encourage students to explore the less glamorous sides of space exploration—business and policy—and to consider how much of a difference careers in these areas can make for our future.



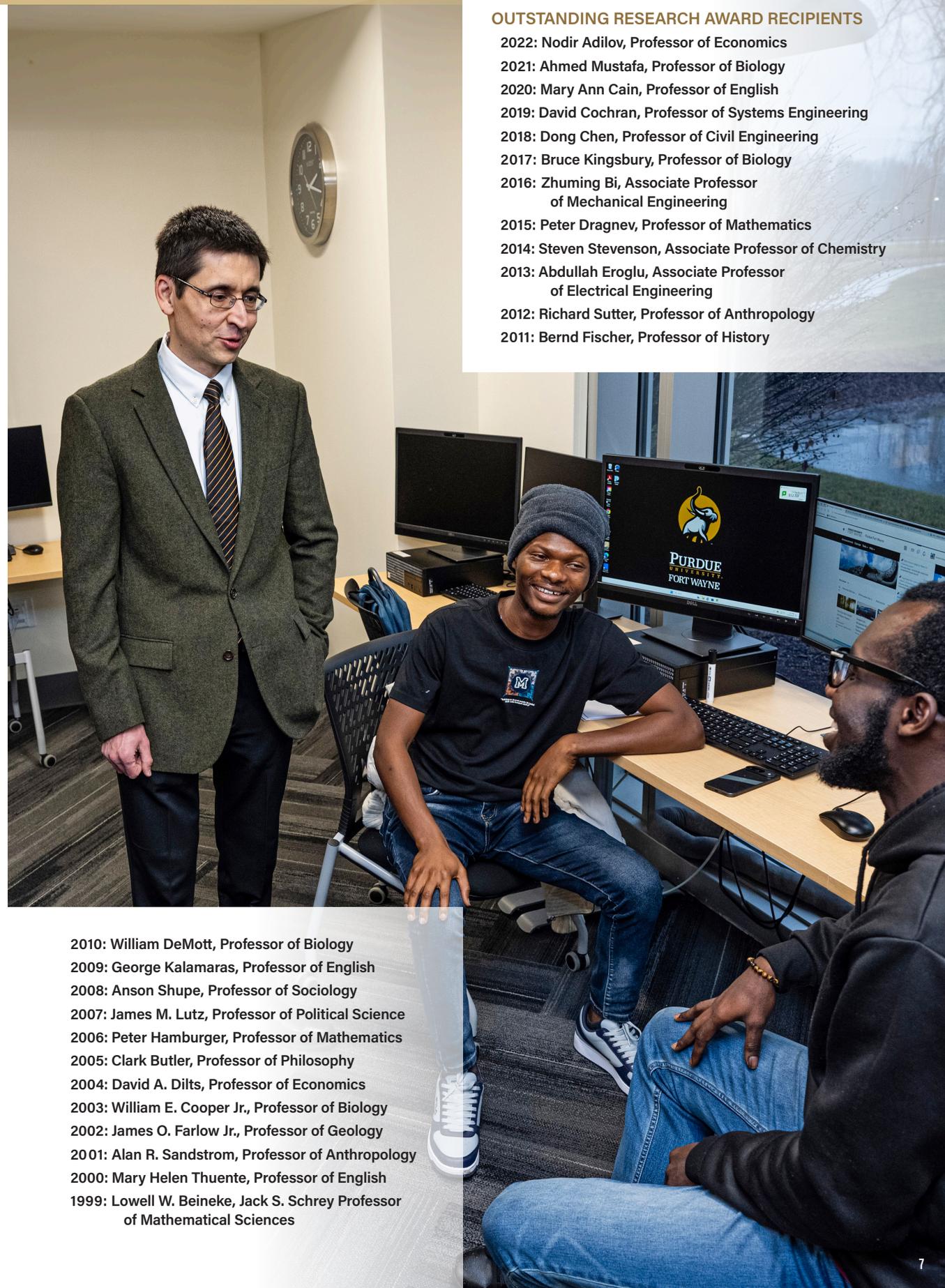
Project Collaborators

Peter J. Alexander, Economist, Federal Communications Commission

Vitali Braun, Space Debris Engineer, IMS Space Consultancy at European Space Agency

Brendan M. Cunningham, Professor of Economics, Eastern Connecticut State University

This study was published in the *Journal of Space Safety Engineering* in 2024. An earlier version of the study was presented at NASA’s Second International Orbital Debris Conference in 2023.



OUTSTANDING RESEARCH AWARD RECIPIENTS

- 2022: Nodir Adilov, Professor of Economics
- 2021: Ahmed Mustafa, Professor of Biology
- 2020: Mary Ann Cain, Professor of English
- 2019: David Cochran, Professor of Systems Engineering
- 2018: Dong Chen, Professor of Civil Engineering
- 2017: Bruce Kingsbury, Professor of Biology
- 2016: Zhuming Bi, Associate Professor of Mechanical Engineering
- 2015: Peter Dragnev, Professor of Mathematics
- 2014: Steven Stevenson, Associate Professor of Chemistry
- 2013: Abdullah Eroglu, Associate Professor of Electrical Engineering
- 2012: Richard Sutter, Professor of Anthropology
- 2011: Bernd Fischer, Professor of History

- 2010: William DeMott, Professor of Biology
- 2009: George Kalamaras, Professor of English
- 2008: Anson Shupe, Professor of Sociology
- 2007: James M. Lutz, Professor of Political Science
- 2006: Peter Hamburger, Professor of Mathematics
- 2005: Clark Butler, Professor of Philosophy
- 2004: David A. Dilts, Professor of Economics
- 2003: William E. Cooper Jr., Professor of Biology
- 2002: James O. Farlow Jr., Professor of Geology
- 2001: Alan R. Sandstrom, Professor of Anthropology
- 2000: Mary Helen Thuente, Professor of English
- 1999: Lowell W. Beineke, Jack S. Schrey Professor of Mathematical Sciences

The Science of Reading: Ensuring That Students Don't Fall Behind

ISABEL NUÑEZ, DEAN OF THE SCHOOL OF EDUCATION AND PROFESSOR OF EDUCATIONAL STUDIES

Literacy is one of the most powerful human skills. Being able to effectively communicate leads to endless possibilities for personal and professional success. And it's something that's near and dear to Isabel Nuñez, dean of the School of Education and professor of educational studies.

Fourth grade, in particular, is a bit of a turning point. It's when a curriculum moves from "learning to read" to "reading to learn," so it's vital that by the end of third grade, students are equipped with strong reading skills, otherwise they may quickly fall behind, and not just in reading. Nuñez explained that her project, Advancing Science of Reading in Indiana, sought to "solve the problem of too many students falling further behind in all academic areas because their literacy skills are below grade level." The project revolved around teaching students to read in the best way possible, according to research, which means determining what our education graduates know and need to know about teaching reading, learning from experts across the country, designing professional-development opportunities for current teachers, and revising curriculum and instruction around reading pedagogy.

This project is unique in that it was a collaboration among three Purdue campuses: West Lafayette, Northwest, and Fort Wayne. Nuñez explained that this partnership "has been an exciting opportunity to learn with and from each other, and to forge closer disciplinary connections across the Purdue system."

Nuñez is pleased with the effects of the project so far. She says that our own education students

are direct beneficiaries because they are "currently experiencing enriched and enhanced preparation for teaching reading." And children are also seeing benefits. According to Nuñez, "The P-12 students of the northeast Indiana community are also positively affected through the strengthened literacy instruction our teacher candidates bring to the schools."

Students always benefit from caring teachers who are passionate about their work. It's clear that Nuñez is one such teacher, and one who through projects and other avenues seeks to impart that passion onto other aspiring and current teachers. Nuñez said, "Literacy is not only critical to academic and professional success; it is also one of the best tools for lifelong development of empathy and wisdom." Who can argue with that?



Grant Sponsor

Lilly Endowment Inc.

Faculty Collaborators

Teri Hogg and Holly Hullinger



An Insurance Company and Math Students: A Mutually Beneficial Pairing

YIHAO DENG, PROFESSOR OF STATISTICS AND CODIRECTOR OF THE CENTER OF APPLIED MATHEMATICS AND STATISTICS

PETER DRAGNEV, PROFESSOR OF MATHEMATICS, CHAIR OF THE DEPARTMENT OF MATHEMATICAL SCIENCES, CODIRECTOR OF THE CENTER OF APPLIED MATHEMATICS AND STATISTICS, AND OUTSTANDING RESEARCH AWARD RECIPIENT

JEFF ANDERSON, PROFESSOR OF MATHEMATICS, ASSOCIATE CHAIR OF THE DEPARTMENT OF MATHEMATICAL SCIENCES, AND CODIRECTOR OF THE CENTER OF APPLIED MATHEMATICS AND STATISTICS

Social media is a loud and proud part of our world—whether we like it or not. It's no surprise that companies are looking to utilize this massively popular communication network to their advantage. Likewise, it's not surprising that many Purdue Fort Wayne students are interested in a career amid the social platforms they've grown up with. Spurred on by this knowledge, Yihao Deng, professor of statistics, and Peter Dragnev and Jeff Anderson, professors of mathematics, all saw the mutual benefit of giving students hands-on experience while helping a company optimize their communication strategies. This is why they sought to obtain a grant that would allow them to do just that.

Enter the Indiana Data Mine, sponsored by Lilly Endowment Inc., an initiative that allows students to engage in real world problem-solving experiences. Deng explained how the project worked: "The student team collected social media data using web-scraping methods from four platforms, such as Facebook, Instagram, LinkedIn, and Twitter, and obtained insights into the social media campaigns of Central Insurance Company. The team also analyzed comments and reactions of competitors and developed networks to evaluate Central Insurance Company's outreach. The project helped the company better

understand the effect of social media in its effort to reach customers and partners."

An interesting aspect of this project was that it was the first Indiana Data Mine project that involved collaboration of students from three different institutions—Purdue University Fort Wayne, Purdue University, and Youngstown State University. As a result, Deng said, "The project set up a good example of academic-industry collaboration in the northeast Indiana region." It also "offered a unique opportunity for the students to understand the business model of Central Insurance Company and to utilize their knowledge and analytical skills to help the company develop actionable strategies for operational improvement."

Giving students hands-on, real-world experience that can make a significant difference, and allowing them to enhance their knowledge in areas that will benefit their career trajectory—it's one hallmark of a great education. And it's all happening right here at Purdue Fort Wayne.

Additional Details

Central Insurance Company via Indiana Data Mine



Left to right: Jeff Anderson, Peter Dragnev, and Yihao Deng

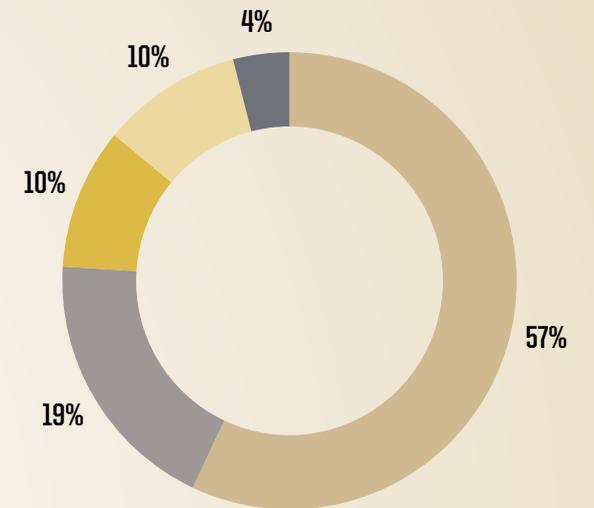
Individual Sponsored Programs Funding by Source and Recipient

Grants and Contracts (five-year history)



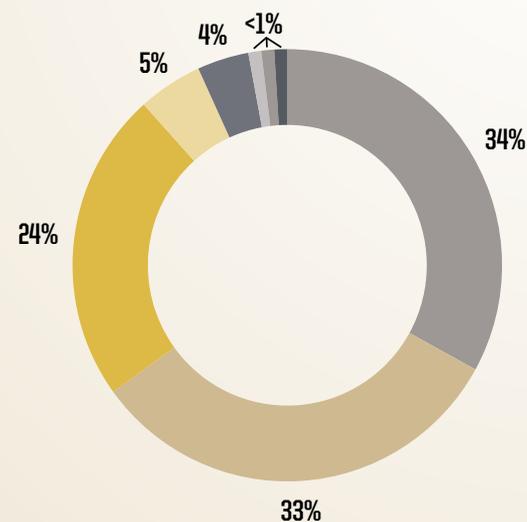
Grant Sources

Federal	\$1,526,363
State	\$520,798
Private	\$280,223
Foundation	\$262,422
University	\$103,000
TOTAL	\$2,695,806



Grants by Academic or Administrative Unit

Office of Academic Affairs	\$918,328
Office of Diversity, Equity, and Inclusion	\$883,552
College of Science	\$650,776
College of Liberal Arts	\$111,043
Engineering, Technology, and Computer Science	\$86,052
College of Visual and Performing Arts	\$16,000
School of Education	\$15,960
Doerner School of Business	\$14,095
TOTAL	\$2,695,806



2022-23 Funding Success Rate

TYPE	NUMBER SUBMITTED	AMOUNT REQUESTED	NUMBER FUNDED	AMOUNT FUNDED	PERCENT FUNDED
Federal	24	\$8,435,529	11	\$1,529,363	18%
State	8	\$754,893	6	\$520,798	69%
Foundation	21	\$819,004	11	\$262,422	32%
Private	24	\$500,072	19	\$280,223	56%
University	28	\$238,000	12	\$103,000	43%
TOTAL	105	10,747,498	59	\$2,695,806	26%

Individual Sponsored Programs Funding by Source and Recipient

FEDERALLY FUNDED PROJECTS			
PI; CO-PI	PROJECT TITLE	SPONSOR	AMOUNT FUNDED
COLLEGE OF ENGINEERING, TECHNOLOGY, AND COMPUTER SCIENCE			
Wang, Guoping	Enrichment Program for Elementary School Students	National Aeronautics and Space Administration (NASA) and Indiana Space Grant Consortium (INSGC)	\$5,786
COLLEGE OF SCIENCE			
Jordan, Mark	Genetic Analysis of Spotted Turtle and Blanding's Turtle in Ohio and Michigan	US Fish and Wildlife Service (USFWS), Ohio Department of Natural Resources (ODNR), and Toledo Zoo and Aquarium	\$67,944
Stevenson, Steven	Fullertubes and Metallofullertubes New Molecular Architectures and Seminal Studies (RUI)	National Science Foundation (NSF)	\$348,639
PURDUE FORT WAYNE ENVIRONMENTAL RESOURCES CENTER (ERC)			
Kingsbury, Bruce	Cooperative Agreement Year 2 Amendment to add USGS Collaborative Space	US Geological Survey (USGS)	\$5,692
SCHOOL OF EDUCATION BEHAVIORAL HEALTH AND FAMILY STUDIES INSTITUTE			
Jordan-Miles, Alice	Indiana Statewide LOSS Team Network Director	US Department of Health and Human Services (HHS) Substance Abuse and Mental Health Services Administration (SAMHSA) and Mental Health America of Indiana	\$10,000
OFFICE OF ACADEMIC AFFAIRS DIVISION OF CONTINUING STUDIES			
Shie, Wesley	Northeast Indiana Small Business Development Center	US Small Business Administration (SBA) and Indiana Economic Development Corporation (IEDC)	\$207,750
OFFICE OF DIVERSITY, EQUITY, AND INCLUSION			
Chowdhry, Sunila	2023 PFW Summer Food Service Program	US Department of Education (ED)	\$6,462
Chowdhry, Sunila	Upward Bound I	US Department of Education (ED)	\$297,601
Chowdhry, Sunila	Upward Bound II	US Department of Education (ED)	\$297,601
Hammonds, MarTeze	iSTEM to Know NASA Outreach Program 2	National Aeronautics and Space Administration (NASA) and Indiana Space Grant Consortium (INSGC)	\$20,000
Kever, Shubitha	PFW TRIO Student Support Services (Year 3)	US Department of Education (ED)	\$261,888

STATE-FUNDED PROJECTS			
PI; CO-PI	PROJECT TITLE	SPONSOR	AMOUNT FUNDED
COLLEGE OF LIBERAL ARTS			
Cochran-Smith, Jamie; Smith, Andrew	Archaeological Survey of the Civilian Conservation Corps Camp Barracks and High Probability Areas in Pokagon State Park, Steuben County, Indiana	Indiana Department of Natural Resources (DNR) Division of Historic Preservation and Archaeology (DHPA)	\$30,390
Cochran-Smith, Jamie; Smith, Andrew	Archaeological Survey of High Probability Areas in Trine State Recreation Area, Steuben County, Indiana	Indiana Department of Natural Resources (DNR) Division of Historic Preservation and Archaeology (DHPA)	\$20,591
PURDUE FORT WAYNE THREE RIVERS LANGUAGE CENTER (TRLC)			
Bischoff, Shannon	I-TELL (Indiana Teachers of English Language Learners) Course Reimbursement	Indiana Department of Education (IDOE) and University of Indianapolis	\$184,167
COLLEGE OF SCIENCE			
Jordan, Mark	2023 Graduate Research Support IUSM-FW campus	Indiana University School of Medicine	\$24,490
PURDUE FORT WAYNE ENVIRONMENTAL RESOURCES CENTER (ERC)			
Kingsbury, Bruce	Exploring the Demographics of Blanding's Turtles (<i>Emydoidea blandingii</i>) and Wood Turtles (<i>Glyptemys insculpta</i>) Populations at Camp Grayling	Michigan Department of Military and Veterans Affairs (DMVA)	\$90,530
OFFICE OF ACADEMIC AFFAIRS DIVISION OF CONTINUING STUDIES			
Shie, Wesley	Northeast Indiana Small Business Development Center	Indiana Economic Development Corporation (IEDC) and US Small Business Administration (SBA)	\$170,630

PRIVATELY FUNDED PROJECTS			
PI; CO-PI	PROJECT TITLE	SPONSOR	TOTAL FUNDED
COLLEGE OF ENGINEERING, TECHNOLOGY, AND COMPUTER SCIENCE			
Bi, Zhuming	Modelling for Performance Prediction of Positive Displacement Pumps	Fill-Rite Company	
Chen, Bin	Non-Ferrous Metal Sorting for Optical Sensor-Based Sorting Systems (Faculty in Residence)	Sortera Alloys	
Coronado, Adolfo	Greater Fort Wayne Hispanic Chamber of Commerce Website Project	Greater Fort Wayne Hispanic Chamber of Commerce	
			\$75,686
PURDUE FORT WAYNE RESEARCH CORE ARGAST FAMILY IMAGING AND ANALYSIS LAB			
Chen, Dong	Use of Scanning Electron Microscope (SEM)	AcousTech Inc.	
Chen, Dong	Use of Scanning Electron Microscope (SEM)	Essex Furukawa Magnet Wire	
Chen, Dong	Use of Scanning Electron Microscope (SEM)	OrthoPediatrics	
Chen, Dong	Use of Scanning Electron Microscope (SEM)	Fort Wayne Metals	
Chen, Dong	Use of Scanning Electron Microscope (SEM)	Valbruna Slater Stainless Inc.	
Chen, Dong	Use of Scanning Electron Microscope (SEM)	VOSS Automotive Inc.	
Chen, Dong	Use of Scanning Electron Microscope (SEM)	SCP Limited	
Chen, Dong	Use of Scanning Electron Microscope (SEM)	Franklin Electric	
Chen, Dong	Use of Scanning Electron Microscope (SEM)	DOT America Coatings	
Chen, Dong	Use of Scanning Electron Microscope (SEM)	Fill-Rite Company	
			\$88,000
PURDUE FORT WAYNE CENTER OF EXCELLENCE IN SYSTEMS ENGINEERING (CESE)			
Cochran, David	Order to Delivery Lifecycle	HighTech Signs	
Cochran, David	Develop Solutions to Achieve the 7 FRs of Manufacturing System Design	Shuttleworth	
Cochran, David	Phase 2 of the Order to Delivery Lifecycle	HighTech Signs	
			\$84,450
COLLEGE OF SCIENCE			
Marshall, Jordan	Vegetative and Reproductive Response of Wisconsin Fast Plants to Environoc 401 Dilution Treatments	Biodyne USA	
Thekkiniath, Jose	GRA Support for Zach Biddle: Increasing Yield and Diversity of a Microorganism Consortium in a Bioreactor Through Pressure Pulsation	Biodyne USA	
			\$25,722
RICHARD T. DOERMER SCHOOL OF BUSINESS			
Nazarov, Zafar	Economic Impact Analysis for Embassy Theatre	Embassy Theatre	
			\$6,095

FOUNDATION-FUNDED PROJECTS			
PI; CO-PI	PROJECT TITLE	SPONSOR	AMOUNT FUNDED
COLLEGE OF ENGINEERING, TECHNOLOGY, AND COMPUTER SCIENCE			
Bi, Zhuming	Emergency Evacuation System for Disabilities in Wheelchair–United States	Institute of Electrical and Electronics Engineers (IEEE)	\$4,400
COLLEGE OF LIBERAL ARTS			
LeBlanc, Sarah	You Got Your What? Parent, Adolescents, and Menstruation Communication	National Communication Association (NCA)	\$12,062
PURDUE FORT WAYNE CENTER FOR SOCIAL RESEARCH (CSR)			
Holland, Donna	Preconception Survey 2022	Healthier Moms and Babies	\$18,019
COLLEGE OF SCIENCE			
Friedman, Ronald	Indiana Youth Programs on Campus Program at Purdue Fort Wayne	Lilly Endowment	\$149,981
Frolova, Liliya	Synthesis of Novel Anticancer Compounds Based on Pyrrolidine-2-on	Indiana Academy of Science	\$3,000
SCHOOL OF EDUCATION			
Núñez, Isabel	Purdue Planning Grant for Advancing Science of Reading in Indiana	Lilly Endowment	\$5,960
PURDUE FORT WAYNE NORTHEAST INDIANA SCIENCE, TECHNOLOGY, ENGINEERING, AND MATH EDUCATION (NITEM)			
Nowak, Jeffrey	Concepts 2 Creation (C2C)	Purdue Polytechnic Institute Indiana Manufacturing Competitiveness Center (IN-MaC) Foundation Micro-Grant Program	\$2,000
PURDUE FORT WAYNE COMMUNITY RESEARCH INSTITUTE (CRI)			
Blakeman, Rachel	Poke-Bache Economic Impact Study	Fort Wayne Trails Inc.	\$7,000
Blakeman, Rachel	Project Management, Grant Writing, Administration Services for FY 2023	The Lutheran Foundation	\$30,000
Blakeman, Rachel	Fair Housing Data Request	City of Fort Wayne Metropolitan Human Relations Commission	\$24,000
Blakeman, Rachel	CRI School Care Team Project AWARE Application	Fort Wayne Public Television Inc.	\$6,000

UNIVERSITY-FUNDED PROJECTS | INTERNAL GRANT AWARDS: \$8,000-\$15,000

PI; Co-PI	Project Title
COLLEGE OF LIBERAL ARTS	
Aitalieva, Nurgul	Black Lives Matter, Ideology, and Public Attitudes Toward Defunding the Police
An, Jiangshan	Supporting English Language Learners (ELLs): Language Instruction in Content Learning
Bauer, Deborah	Welcome to Wallerland: John Lewis Waller's Encounters with French Imperialism in 1890s Madagascar
Keller, Elizabeth	Networks of Care: How Patients and Providers Navigate Illness, Communication, and Empathy
LeBlanc, Sarah	Developing a Menstruation-Friendly Assistance Campaign: Discovering the Communication Between School Nurses and Menstruating Students
Sutter, Richard	Biological Relatedness and Origins of Chimu-Era (AD 950-1470) Child Sacrifices from Pampa la Cruz, Peru
COLLEGE OF SCIENCE	
Frolova, Lillya; Thekkiniath, Jose; and Sharma, Arjun	Synthesis and Evaluation of Antibacterial and Synergistic Activity of Novel Azaindole Derivatives Against ESKAPE Bacteria
Thekkiniath, Jose	Exploring the Role of Parasite-Derived Extracellular Vesicles in Modulating Immune Responses in Human Babesiosis
Ursino, Eugenio	Simulating X-ray Maps of the Intergalactic Medium
COLLEGE OF VISUAL AND PERFORMING ARTS	
Ding, Suining	Using Space Syntax to Examine Users' Perception of Privacy in Doctors' Office Waiting Rooms: Seating Visibility and Seating Preferences
Stultz-Dessent, Kylie	Sounds of Home: Music for Clarinet Inspired by Indiana's Art and Architecture
RICHARD T. DOERMER SCHOOL OF BUSINESS	
Sun, Xueyun	The Effects of Offshore Activities on Accounting Restatements and Fraud

PURDUE FORT WAYNE EXTERNAL FUNDED AWARDS AND CONTRACTS

Each of the following sponsors provided grant or contract support during this current fiscal year. Though some organizations funded more than one proposal, each sponsor is listed only one time.

FEDERAL AGENCIES

- National Aeronautics and Space Administration
- National Science Foundation
- US Department of Education
- US Department of Health and Human Services Substance Abuse and Mental Health Services Administration (SAMHSA)
- US Department of the Interior
- US Fish and Wildlife Service
- US Geological Survey

STATE AGENCIES

- Indiana Department of Education
- Indiana Department of Natural Resources Division of Historic Preservation and Archaeology
- Indiana Economic Development Corporation
- Indiana Space Grant Consortium
- Michigan Department of Military and Veterans Affairs

PRIVATE AND FOUNDATIONS

- AcouSTech Inc.
- Biodyne Midwest
- DOT America Coatings
- Embassy Theatre
- Essex Furukawa Magnet Wire
- Fill-Rite Company
- Fort Wayne Metals
- Fort Wayne Public Television Inc.
- Fort Wayne Trails Inc.
- Franklin Electric
- Greater Fort Wayne Hispanic Chamber of Commerce
- Healthier Moms and Babies
- HighTech Signs
- Indiana Academy of Science
- Institute of Electrical Electronics Engineering
- Lilly Endowment Inc.
- Mental Health America of Indiana
- Metropolitan Human Relations Commission
- National Communication Association
- OrthoPediatrics
- SCP Limited
- Shuttleworth
- Sortera Alloys
- The Lutheran Foundation
- Valbruna Slater Stainless Inc.
- VOSS Automotive Inc.

PURDUE UNIVERSITY®
FORT WAYNE

RESEARCH AND SPONSORED PROGRAMS
OFFICE OF ACADEMIC AFFAIRS
research@pfw.edu