

RESEARCH



Supporting and enabling research success

Mission of the Office of Research is to support, enable, and unburden faculty and students to achieve giant leaps in research and innovation and thereby transform the future.

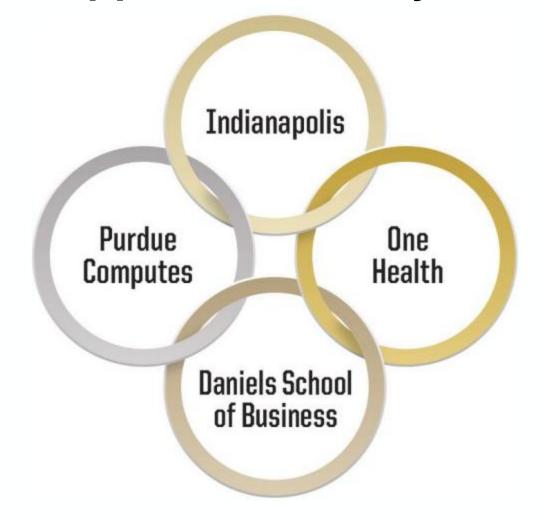
- Optimizing the effectiveness of our programs, services, and investments
- Executing a continuous, comprehensive and relentless drive for greater efficiency and innovation

Our services

- Enable new research and professional opportunities for faculty
- Leverage internal funds for significant & sustained external funding
- Communicate the impact of our research
- Deliver state-of-the-art research administration services
- Reward excellence in research and researchers with major achievements
- Foster entrepreneurship



Purdue Research supports university's strategic initiatives





Purdue Research Portfolio

Creating innovative solutions that secure the nation and the world:

- Improving global health & life sciences
- Strengthening national defense
- Providing a safe and dependable food supply
- Ensuring economic prosperity
- Protecting the environment
- Modernizing housing and transportation infrastructure



World-Class Faculty

State-of-the-Art Facilities

Ground-breaking Partnerships



State-of-the-Art Facilities





Purdue Research: partner of choice for many companies

Total Number of Active Master Agreement = 60



FY 2025





















10 **new** or renewed

Purdue Research

PURDUE UNIVERSITY.

Providing safe and secure livelihoods for all



Advancing Life and Health Sciences

Providing
National Security
and Defense

Saving Energy and Protecting the Environment

Modernizing our Infrastructure Ensuring Economic Prosperity through Data Science and Al Feeding the World

Purdue's Unique Innovation Ecosystem

Powering interdisciplinary solutions to meet the world's key needs Institutes **Scholarship Centers at** Colleges **Discovery Park** District& **Purdue Applied** Commercialization Research **Purdue Research** Institute **Foundation**



PURDUE Students, Staff, Faculty



↓ Discovery Park District (DPD) Institutes and Centers ↓

Institutes and Centers

- 1 Center for Education and Research in Information Assurance and Security
- 2 Birck Nanotechnology
- 3 Policy Research Institute
- Network for Computational NanoTech
- 5 Institute for a Sustainable Future
- 6 Center for Global Food Security
- 7 Quantum Science and Engineering Institute
- 8 Center on Al for Digital, Autonomous and **Augmented Aviation**
- 9 Electron Microscopy Center

Health/Life Sciences Cluster

- Bindley Bioscience Center
- Institute for Drug Discovery
- Institute for Cancer Research
- Institute of Inflammation, Immunology and Infectious Disease
- 5 Institute for Integrative Neuroscience
- (6) William D. and Sherry L. Young Institute for Advanced Pharmaceutical Manufacturing
- 7 Lilly Purdue Research Center

Affiliated Entities

- 1 Joint Transportation Research Program
- 2 Center for Innovative and Strategic Transformation of Alkane Resources
- 3 Emergent Mechanisms in Biology of Robustness Integration and Organization Institute
- 4) Women's Global Health Institute
- (5) Scalable Asymmetric Lifecycle Engagement
- Digital Enterprise Center
- Center for Secure Microelectronics Ecosystem
- Rosen Center for Advanced Computing
- The Data Mine

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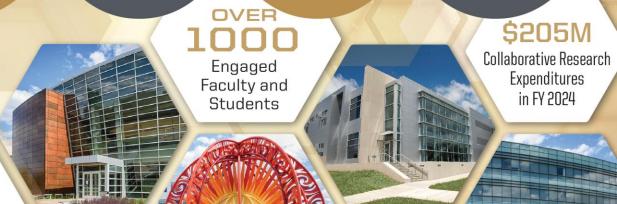
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Enabling our people to achieve breakthroughs and drive innovations in support of solving the world's most critical problems

- Marrying virtual with physical, digital twins, and AI as enablers
- > Vertically-integrated design for system of system capability
- Co-locating academia, industry, and national labs
- → World-Class R&D Facilities

Translating Innovation with DPD Industry **Partners**



Purdue Applied Research Institute (PARI) opens new partnership possibilities

An agile platform to scale applied research

PARI is Purdue's nonprofit applied research arm that launched in July 2021

- Hypersonics Lab
- Microelectronics Lab
- Energetics Lab
- Global Development and Innovation Lab
- Infrastructure Lab



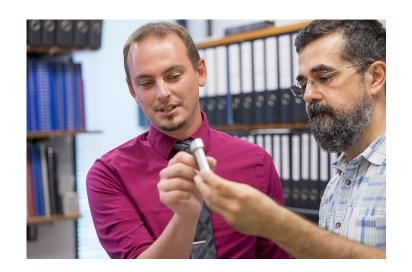
HYPULSE shock tunnel at the Purdue
Hypersonics and Applied Research Facility



Purdue Research Foundation

Forge your Future

- Technology Transfer and Commercialization
- Partnership Resources
- Economic Development
- Innovator and Entrepreneurs





Purdue innovation could provide more effective way to deliver coolant to turbine blades, make engines more efficient - Purdue University News

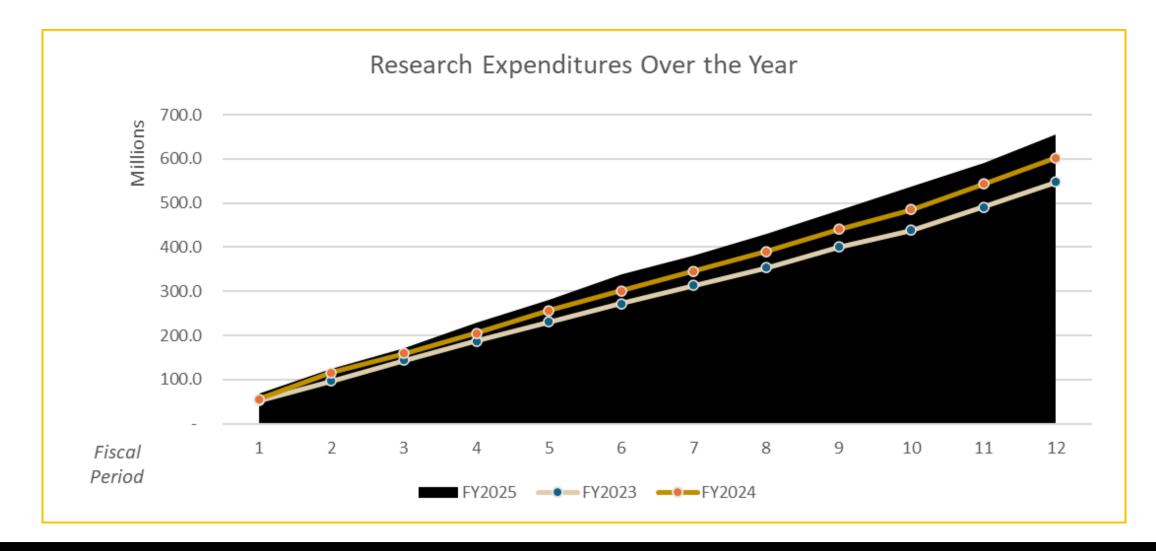
Research Awards - FY 2019 to FY 2025

Research Awards FY2019-FY2025





Research Expenditures -FY 2025





Research Excellence: Initiatives to Support Faculty

Funding

- Faculty Enhanced Research Appointment Program
- Federal Appropriations Process
- Funding support for Purdue University Libraries Open Access Publishing Fund
- Purdue Research Bridge Program
- SPARK: New round of support for teams pursuing large, competitive national center grants

Support

- Faculty Recognition Office
- Purdue Faculty Concierge
- Enhanced IRB/IACUC support
- Trial credit card program for externally funded research project purchases
- Purdue Excellence in Research Administration (PERA)
- Increased Sponsored Program Services (SPS) staffing by 25%
- Major Capital Projects \$1.3 billion

Major Capital Projects

Buildings, equipment





Purdue University Office of Research

Sponsored Program Services

Security & Intelligence

Human Resources

Communications

Regulatory Affairs















Partner Relations

Facilities















Export Controls













Operation s

Scientific Integrity

Some key individuals who can help you



Dan DeLaurentis EVP, Research ddelaure@purdue.edu



Ken Sandel
Sponsored Program Services
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Preeti Sivasankar Strategic Interdisciplinary Research

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Jamie Mohler Research Compliance, Integrity & Security

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Joey Wallace Purdue in Indianapolis

jwalla78@purdue.edu

Back Up Slides

Institutes and Centers at Discovery Park District

Advancing large-scale research leading to interdisciplinary breakthroughs to solve the world's most critical problems

- bringing together students, staff, and faculty across disciplines
- achieving "system of systems" capabilities by leveraging vertically integrated design innovation from nano/micro/cellular scale to device/platform/therapy scale to harness complexity
- combining 'virtual with physical' through AI/ML to driving rapid innovation and translation

"Our structure expands research, partnership, and funding opportunities and greater involvement with industry, federal labs and venture funds."

- Dan DeLaurentis

Executive Vice President for

Research



PERA (Purdue Excellence in Research Administration)

Next-generation system automates many processes required to apply for research grants, manage funding, and apply to regulatory committees such as IRB and IACUC

How PERA saves time for researchers:

- Unified platform to manage & monitoring research projects
- Enhanced transparency
- Automated research administration business processes
- Dashboard with centralized and consolidated information
- Automated workflow, routing, approvals & communications

