



FY 2021 - 2022 ANNUAL REPORT

# Advancing the Mission of Purdue University

Purdue Research Foundation supports
Purdue University's land-grant mission by
helping the University improve the world
through its technologies and graduates.

- Manages and protects intellectual property developed at Purdue
- Makes funding available to faculty, staff, and students to aid in scientific investigation, research, and/or educational studies
- Promotes startup companies and entrepreneurial activities
- Owns and manages real estate in Discovery Park District at Purdue and Purdue Research Parks
- Cultivates a diverse, vibrant live-work-play community
- Acquires, constructs, and improves Purdue's facilities
- Manages gifts, trusts, and Endowments
- Maintains strong, symbiotic relationships with strategic partners and allies
- Works to acquire real estate for University expansions







### Message from Brian Edelman

Purdue Research Foundation celebrated another exceptional year of innovation, growth, and advancement during FY 2021-2022. We have built on the momentum from previous years to reach even more high-quality milestones across the enterprise.

First to note, semiconductors are an ongoing strategic focus for the Foundation and Purdue University. Several announcements about key partnerships and plans have been made, including SkyWater Technology's recent commitment to establish a \$1.8 billion semiconductor manufacturing facility in Discovery Park District at Purdue. Other highlights for this endeavor include MediaTek opening the company's first semiconductor chip design center in the Midwest – to be housed in the district, a new Semiconductor Degrees Program at the University, and new microelectronics partnerships between the University and Ivy Tech.

Hypersonic technology is also a preeminent focus for both the University and Foundation. Hypersonic research is a critical component of Purdue's National Security and Technology initiative, and it is one of the pillars of Purdue's Next Moves. That said, this year we announced potential plans for the Hypersonic Ground

Test Center (HGTC) in the Discovery Park District. This first-of-its-kind test facility is modeled to address the critical shortage of ground test facilities in the country. The launch of HGTC and many other initiatives fortifies the University and Foundation as the epicenter for hypersonics research and production.

Discovery Park District - the 400-acre, \$1.2 billion mixed-used development - has grown rapidly as both Saab and Schweitzer Engineering Laboratories opened their multimillion-dollar facilities here, and SkyWater and Rolls-Royce have signed agreements to build and expand their presence. When they reach their full capacity, there will be more than 1,000 new jobs created to support them.

The residential sector of the district has grown substantially, too. One hundred percent of apartments built in the Provenance residential village have been completed, leased, and committed to district residents. Thirty-seven single-family homes have been built or sold in the district, with another 40 to be constructed.

Additionally, Ascension St. Vincent will be purchasing several acres of land in the district for a critically important neighborhood hospital



BRIAN EDELMAN
PRESIDENT
PURDUE RESEARCH FOUNDATION

in West Lafayette. As part of our master plan, this comprehensive medical facility provides the much-needed access to health care for residents of the entire Greater Lafayette region.

Entrepreneurship and commercialization continued to excel this year. The Office of Technology Commercialization is ranked 6th among world universities in terms of granted utility patents from the U.S. Patent and Trademark Office. This persistent pursuit of innovation ranks first in the state of Indiana and second among world universities that do not have a school of medicine. Purdue's patented technologies continue to be licensed in over 100 countries and lifesaving discoveries from University inventors are changing the world. For example, this past year Philip Low and his startup, On Target Laboratories, received FDA approval for a pioneering drug that will be used to detect ovarian cancer during surgery.

Purdue Foundry continued to offer top-flight entrepreneurial resources including funding, networking, and programming. It launched Boost, a new experimental accelerator program for early-stage startups to become ready to receive outside investment. The total capital raised by Purdue-affiliated companies hit \$877 million this year.

We have seen tremendous growth in the University and Foundation Endowments thanks to the vigilant work conducted by the Office of Investments. This fiscal year, despite a challenging market environment, Purdue's Endowment grew. It ended FY22 with a market value of \$3.7 billion, its highest-ever

fiscal year-end market value to date. The Endowment's growth from \$3.6 billion to \$3.7 billion year-over-year, shows our dedication to being conscientious, forward-thinking stewards of these assets.

Throughout this past year, the Foundation continued to provide other essential services to the University, including purchasing and selling real estate as well as providing accounting and financial services as outlined in our mission to serve the University. We have developed and fostered new partnerships and alliances with valued partners like Wabash and Inari as they continue to grow their footprint in both the district and Purdue Research Park.

Through partnerships and collaboration, we have established Discovery Park District as a connected community with our 5G and 6G living lab and infrastructure.

Purdue Research Foundation will continue this momentum in all areas to advance the mission of Purdue University. Whether through placemaking efforts, managing intellectual property developed at the University, or providing top-tier entrepreneurship resources, the Foundation will work nimbly and effectively across all our departments. You can read more about these and other accomplishments in this report.



# Purdue Research Foundation: Our Past Inspires Our Future

The Purdue Research Foundation can boldly advance its mission to support Purdue University because of the strong base built by its founders.

David E. Ross, a prolific Indiana inventor, was concerned that industry did not have access to University knowledge. Because the University, with its status as a public institution, was prevented from assisting private industry, Ross envisioned setting up a nonprofit foundation that could make contacts with industry. He believed the University could help solve problems of industry by using its graduate students on projects, which would also build the graduate school at the same time.

With \$25,000 in starter money from Ross, and a like amount donated by board member Josiah K. Lilly, of Eli Lilly and Co., the Articles of Incorporation for Purdue Research Foundation were filed by Purdue President Edward C. Elliott and the Purdue University Board of Trustees with the Indiana Secretary of State on December 30, 1930.



The Foundation is the silent engine of the University. It manages and protects Purdue University's intellectual property, forges the future by moving innovations to market through startups and licensing agreements, and provides a sense of belonging through ongoing amenities, facilities, and vibrant, intentional communities cultivated for entrepreneurs, industry partners, and families to thrive.

Ross and Lilly created the Foundation; countless others have strengthened it and met the goals of its mission. We remain steadfast in forging the future for innovation, connection, commercialization, and placemaking. The innovations that will move the world forward start with one small step, and we support the University's persistent pursuit of the next giant leap. Our engine enables inventors, entrepreneurs, and companies to help people live longer, healthier, and happier lives, and to solve the world's most pressing problems. We are stewards to ensure their work continues and expands through the 21st century.

#### DISCOVERY PARK DISTRICT AT PURDUE

# The Strategic, Intentional Planning of a Live-Work-Play Community

Purdue Research Foundation continues to exceed milestones and establish new thresholds in its placemaking mission. Discovery Park District at Purdue is a giant leap in placemaking intentionally built for families to thrive, talent to grow, technologies to launch, and businesses to collaborate.

Discovery Park District is a \$1.2 billion, 400-acre mixed-use development just steps away from Purdue University. The district offers a tech city experience and quality of life without tech city cost of living.

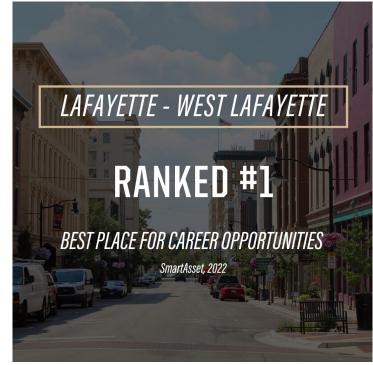
#### **Industry on a National Stage**

In the past year, high-tech companies based in the district like Rolls-Royce and Schweitzer Engineering Laboratories (SEL) have been joined by Saab and SkyWater Technology.

Along with adding jobs to Indiana's economy, locating Saab's facility in West Lafayette alongside Rolls-Royce and SEL makes the state more attractive to the U.S. tech sector.

It also supports Purdue's Next Moves – strategic initiatives designed to advance the University's competitive advantage.

"Purdue and the state of Indiana recognize the importance of the United States maintaining its advanced technology capabilities relative to strategic rivals," Purdue President Mitch Daniels said. "One



of the University's goals and, we believe, duties, is to bring leading-edge companies like Saab to Discovery Park District along with federal laboratories and startups."

(Continued on next page)

#### DISCOVERY PARK DISTRICT AT PURDUE

Indiana Gov. Eric Holcomb said establishing the Saab facility was another example of how industry and the state can succeed together.

"Indiana continues to grow its national footprint in the high-tech, national security sectors because of partnerships like this with Saab," Holcomb said. "When universities make strategic decisions to join such partnerships, like Purdue with its outstanding researchers, students, and alumni who are making the next giant leaps, Indiana's impact on the world grows even stronger."

SkyWater Technology's recent announcement to build a \$1.8 billion semiconductor R&D and production facility in the district is especially relevant as the federal government considers the importance of strengthening the nation's ability to manufacture semiconductors and establish a supply chain.

The district is home to many companies other than those listed above: More than 35 companies have a presence in the district and the Convergence Center for Innovation and Collaboration. These companies have committed more than 1,400 jobs to the community.

#### **Calling the District Home**

Discovery Park District also experienced significant growth in the residential aspect of its live-work-play community development.

The outstanding growth in the district has led to huge milestones in housing over the past year. One hundred percent of the apartments in the Provenance neighborhood have been completed, leased, and committed to district residents. There are more than 100 apartments yet to be built.





# Discovery Park District at Purdue Poised to Become the National Epicenter of Hypersonic Research

The district will be the potential location of the Hypersonic Ground Test Center (HGTC), a first-of-its-kind U.S. facility to test hypersonic technologies.

HGTC will be administered by a nonprofit consortium of national defense industry partners that will manage capital and operational costs. Rolls-Royce North America is the first member of the consortium. Other partners are being recruited. This first-of-its-kind model is under development to address the shortage of ground testing facilities in the country.

HGTC will house two separate testing streams; with initial plans that will allow facility partners to conduct tests in the 3.5-5.0 Mach range or the 4.5-7.5 Mach range. Multiple critical industry partners can undertake work simultaneously, while being ensured full protection of intellectual property and sensitive work.

The announcement of plans for HGTC came on the heels of another major hypersonics announcement at Purdue: construction of the 65,000-square-foot Hypersonics and Applied Research Facility (HARF). That facility will house the only Mach 8 quiet wind tunnel in the world as well as a hypersonic pulse (HYPULSE) shock tunnel and will be located in the district.

These recent investments in hypersonics research help position the Foundation and the University as compelling partners for national defense projects with industry and government. Hypersonics is a critical topic under two of Purdue's Next Moves, a strategic initiative to advance the University's competitive advantage. Hypersonics research expands beyond national security and could lead to innovations in the commercial sector. A hypersonic plane could one day travel from Indianapolis to Los Angeles in under an hour. University researchers and strategic partners are at the forefront of this research.



At Purdue, we're committed to research at the very frontiers of science, especially when it can contribute to the national security of Americans. Becoming home to the nation's premier hypersonics facilities can make such a contribution, while providing enormous new opportunities for our researchers, aspiring entrepreneurs, and job seeking graduates.

MITCH DANIELS
PURDUE PRESIDENT

### **Establishing Preeminence** in Semiconductor Production

Semiconductors form the foundation of a spectrum of products from defense systems to household appliances.

Federal legislation called the CHIPS and Science Act of 2022 will provide billions of dollars for semiconductor research, development, and production in the United States.

Purdue Research Foundation is committed to the goal of establishing the University and Greater Lafayette as the preeminent location for semiconductor work. SkyWater Technology was recruited to open a \$1.8 billion state-of-the-art semiconductor manufacturing facility in Discovery Park District at Purdue. The company expects to create 750 new direct jobs within five years after the facility opens.

Thomas Sonderman, SkyWater's president and CEO, said, "Through our alliance with the Indiana Economic Development Corporation and Purdue Research Foundation, we have a unique opportunity to increase domestic production, shore up our supply chains, and lay the groundwork for manufacturing technologies that will support growing demand for microelectronics."

The Foundation is working with the George Scalise Semiconductor Innovation Center (GSSIC) to bring companies into the ecosystem. The GSSIC's goal is to innovate and collaborate to develop, test, and market manufacturing and supply chain excellence. GSSIC has offices in both West Lafayette and Odon, Indiana, at the WestGate Technology Complex. The location in Odon, which is also home to the Naval Surface Warfare Center Crane, allows the University to collaborate on Department of Defense projects with industry and the U.S. Navy.

A new partnership with MediaTek Inc., a leading global fabless chipmaker, was also announced. MediaTek will open the company's first semiconductor chip design center in the Midwest, located in the district. The center marks another piece of the University's commitment to addressing society's increasing semiconductor demands and the needed talent pool. MediaTek is choosing to locate in the district due to what we are creating: access to phenomenal talent, resources, and innovation.

## Economic Development Office

Established in 2020, the Economic Development Office (EDO) focuses on the attraction, retention, and growth of the Discovery Park District at Purdue and the Purdue Research Parks.

Included in the master plan for the Discovery Park District, there will be inpatient and emergency care within the city of West Lafayette. Ascension St. Vincent announced plans to build a micro-hospital in the district and is purchasing almost six acres of land at the northeast corner of Airport Road and Highway 231. A groundbreaking is planned for Fall 2022. EDO's persistence to attract and grow the district was a key asset to this transformative success for the community.

Micro-hospitals bridge a persistent gap, offering quick service and acting as a middle ground between larger hospitals and urgent care centers. Inpatient hospital stays have become less common, and micro-hospitals provide convenient alternatives that are close to home and smaller, with easily accessible surface parking, shorter wait times, and lower costs.

Key features of the Ascension St. Vincent micro-hospital include:

- Eight private inpatient medical beds
- Eight Emergency Department treatment rooms
- CT and other imaging services
- Laboratory services
- Modern architecture
- Convenient parking
- State-of-the-art consumer-focused technology, including telemedicine

Purdue University President Mitch Daniels said the addition of a new medical facility is an important piece of the growing district.

"When we first envisioned this new live, work, play district, access to health facilities was among the priorities," Daniels said. "Ascension St. Vincent has stepped up to provide this much-needed new option for residents of our entire region."

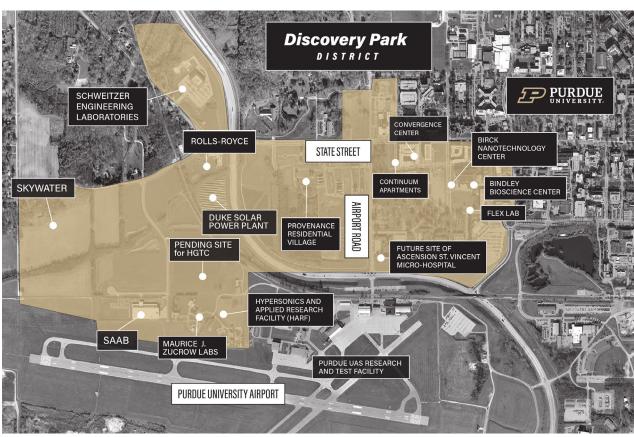
"In alignment with the mission of Purdue University, we are attracting companies to the Purdue ecosystem and building a pipeline for Purdue graduates, talent, and IP to be shared with these companies and the world. Our team is here to ensure that partner companies are positioned to maximize ROI on their presence in the Purdue ecosystem."

VICE PRESIDENT ECONOMIC DEVELOPMENT OFFICE









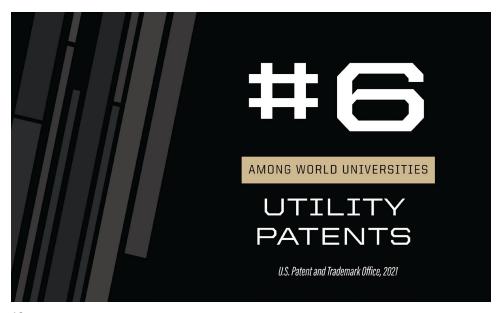




# Office of Technology Commercialization

The Office of Technology Commercialization (OTC) operates one of the most comprehensive and active technology transfer programs among leading research universities in the United States. Services provided by this office support the economic development initiatives of Purdue University and benefit the University's academic activities through protecting, licensing, and commercializing Purdue intellectual property.

In 2021, OTC reached new heights when it ranked #6 among all international universities that received patents from the U.S. Patent and Trademark Office. Its 169 patents ranked first both in Indiana and the Big Ten Conference, and second among universities that do not have a school of medicine.



Vetting invention disclosures and applying for patent protection on intellectual property, however, is just part of the mission of the Office. In FY 2021-2022, it reached the following milestones:

394
Invention Disclosures

713
Patent Applications Filed

**229**Total Patents Received, U.S. and International

**159**Options and Licenses Executed on 236 Technologies

13
Startup Companies Founded Based on Purdue IP

It was also an extraordinary year for pharmaceutical companies licensing innovations developed by Philip Low, the Presidential Scholar for Drug Discovery and Ralph C. Corley Distinguished Professor of Chemistry in the Purdue University College of Science's Department of Chemistry.

In November 2021, the FDA approved one of Low's innovations, a drug designed to help surgeons find ovarian cancer tumors and cells by turning them fluorescent green. On Target Laboratories, which licenses the imaging agent through OTC, markets the drug as Cytalux.

In March, the FDA approved another drug that groundbreaking research from Low laid the foundation for: a precision targeted therapy for advanced prostate cancer. Novartis licensed Low's work and markets the drug as Pluvicto.

PRF wants the process of disclosing inventions and obtaining patent protection to be as smooth as possible so Purdue inventors and entrepreneurs can be as successful as possible. Ensuring the process is clear and that inventors know where to go for assistance will be key. I also want to ensure potential licensees and entrepreneurs find engaging with our teams to be intuitive.

BROOKE BEIER
SENIOR VICE PRESIDENT
COMMERCIALIZATION



Among its many resources, OTC helps researchers make their innovations more attractive for commercialization by offering the Trask Innovation Fund. The fund makes awards into faculty labs twice a year. University researchers receiving funding in the two 2021 cycles were:

- Somali Chaterji, College of Engineering
- Eckhard Groll, College of Engineering
- Guri Johal, College of Agriculture
- Dr. Deborah Knapp, College of Veterinary Medicine
- Saeed Mohammadi, College of Engineering
- Robert Kramer, Purdue University Northwest College of Engineering and Sciences
- Guang Lin, College of Science and College of Engineering
- Craig Goergen, College of Engineering
- Torbert Rocheford, College of Agriculture

Purdue Research Foundation is not resting on its laurels. Brooke Beier was promoted to Senior Vice President of Commercialization. In addition to her responsibilities in leading OTC, Beier will oversee Purdue Foundry, an entrepreneurship and commercialization hub that helps Purdue innovators create startups. The common leadership will continue to align and further the coordination between the two commercialization engines.







## **Purdue Foundry**

Purdue Foundry is an entrepreneurship and commercialization hub whose professionals help Purdue innovators create startups and scale. Upon being named Senior Vice President for Commercialization at Purdue Research Foundation, Brooke Beier now oversees the Foundry in addition to her responsibilities in leading the Office of Technology Commercialization.

Purdue Foundry offers a series of cohort-based prgrams, workshops, coaching, networking, grant-writing support, and investment opportunities – all within a carefully constructed ecosystem designed to help Purdue founders move their innovative ideas to market.

In 2021-22, Purdue Foundry launched Boost, an experimental program designed to help early-stage startups become ready for, and receive, outside investment. The companies selected to participate in the pilot cohort proved that their solution addresses market needs and are on the cusp of launching a new product. Each received a \$5,000 non-dilutive grant at the start of the program.

The companies participated in several weeks of programming, including consultations with entrepreneurs-in-residence, mentors, and industry professionals. The Boost accelerator concluded with business pitches to a panel of venture capitalists and angel investors; if two panelists decided a team was worthy of investment, Purdue Foundry invested \$25,000. Three companies received the investment: Araqev, Pluto Aerospace, and ReproHealth Technologies.



The Foundry also awarded \$300,000 to three companies through the Ag-Celerator Fund: Insignum AgTech, NanoBio Designs, and Verility.

Ag-Celerator, created in 2015, is a \$2 million innovation fund designed to provide critical startup support for innovators. The fund is managed by Purdue Ventures, the investment arm of the Purdue Foundry with support from the Purdue College of Agriculture, OTC, and the agricultural industry. Entrepreneurs whose startups commercialize technology in any agricultural field are now eligible to apply for the semiannual competition. In 2021, funding

#### PURDUE FOUNDRY STARTUP SUCCESSES

Neurava, Purdue Foundry client, won Innovation of the Year from TechPoint Mira Awards

Glimpse, Purdue student startup, raised \$6.2 million in Series A funding





TOTAL CAPITAL RAISED BY AFFILIATED CLIENT COMPANIES UP 35% FROM YEAR BEFORE



from Purdue's Next Moves strategic initiatives allows Ag-Celerator to open the competition to any Purdue startup technology that impacts a related agricultural field, including animal health.

Purdue Ventures oversees the Foundry's investment funds and now has 66 companies in its investment portfolio. It has made \$4 million in investments to 18 companies in the previous 12 months, raising its total investments to \$13 million to date.

# SAAB EMPLOYEES 18 DOMESTIC RELOCATION AND

DUAL CAREER SUPPORT

# **Alliance Management**

Attracting businesses and ensuring that they have the physical environment needed to succeed are two facets of the Placemaking team at Purdue Research Foundation.

However, with the exponential growth of Discovery Park District at Purdue and Purdue Research Parks, there are additional critical needs to ensure businesses locating to Purdue thrive.

Enter Alliance Management.

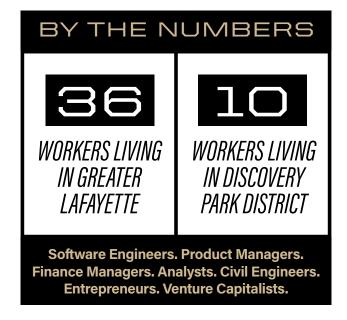
Strategic partners that plant their flag in Greater Lafayette not only need the exceptional talent pipeline available at Purdue University as they grow, but also need a sense of belonging and inclusion in a new community. Alliance Management helps businesses and their new hires integrate and thrive in the community by providing relocation assistance, dual career support, virtual town hall meetings with community partners, networking events, campus and

housing tours, job postings, and more. "Partners can expect Alliances to perform two distinct responsibilities: Keeping all promises made as the partner was being recruited and seeking holistic growth opportunities for the partner within the Purdue and Greater Lafayette ecosystem," said Greg Deason, Senior Vice President of Alliances and Placemaking.









# Work From Purdue

Work From Purdue is a first-of-its-kind program that invites and incentivizes remote workers to move to Greater Lafayette and join the Discovery Park District at Purdue community. As part of the Alliance Management team, Work From Purdue fosters connection and connectivity in the Purdue ecosystem. From stipends to dining credits at the Atlas Family Marketplace in the newly renovated Purdue Memorial Union, Work From Purdue's various relocation packages are designed to support new residents in making the most of their new home from day one.

The trend in 2022 was halo-effect movers, or people who moved because of the University's reputation, lower cost of living, and community engagement activities.

For the 2022-23 fiscal year, the program will include downtown Lafayette as a housing option. The area is within walking distance of the University and is a vibrant, active part of the community. Work From Purdue has a goal to recruit 50 workers to the area by the end of the next fiscal year.

### **Physical Facilities**

Purdue Research Foundation manages more than 1,500 acres and 75-plus buildings in multiple locations around the state of Indiana where thousands of students, faculty, tenants, entrepreneurs, and others live, work, and play. Capital projects, development planning, facility maintenance, and project management of Discovery Park District at Purdue and the expansive network of Purdue Research Parks all fall under the purview of the Physical Facilities team at the Foundation.

#### **Discovery Park District**

The Convergence Center for Innovaiton and Collaboration is the centerpiece of comprehensive placemaking. It was designed to create a dynamic entrepreneurial business environment, to attract high-tech companies, and to launch new startups all colliding within a space that spans from flexible offices to build-to-suit offices. Convergence was planned and built with sustainability and efficiency in mind as part of the master plan and is LEED Silver Certified by the USGBC.

The district continues to grow and evolve as corporate partners locate jobs and workers to the area, and those workers need options for housing, entertainment, health care, education, and lifestyle amenities — outcomes of a community-building approach marked by vision and careful planning.

#### **Purdue Research Parks**

Purdue Research Parks support startups and established companies in their commercialization efforts to bring products to the marketplace. The park network extends throughout the state of Indiana with locations in West Lafayette, Merrillville, Odon, and New Albany. The locations offer Class-A office and wet-lab space, shared conference space, and co-working space, which keep costs down for early-stage startups and mature companies alike.

The Purdue Technology Centers within the parks serve as business incubators for companies in multiple sectors including agriculture, aerospace, high-tech manufacturing, life sciences, and pharmaceuticals. The companies contribute to the local communities around each park with their high-value, high-paying jobs.

The Purdue Research Park of West Lafayette was established in 1960 and is located just north of the Purdue University campus. The 725-acre park is home to more than 300 companies, ranging in size from startups to publicly traded companies. It is also home to the Purdue Railyard Coworking Space, one of the largest co-working facilities in the U.S. with 26,140 square feet of space nestled in the Purdue Research Park's flagship incubator, the Herman and Heddy Kurz Purdue Technology Center. There are hundreds of acres available for multiple site options, allowing for custom layout and expansion opportunities.

Discovery Park District is a gateway not only for our community but for intellectual discourse as students, faculty, and staff interact with commercial partners in an area that features modern and innovative living, learning, shopping, dining, and recreation.

JEREMY SLATER
VICE PRESIDENT
CAPITAL PROJECTS AND FACILITIES



#### **Human Resources**

While the world has emerged from the protocols of the COVID-19 pandemic, people have only begun the journey to discover how they will accomplish their work in the years to come. In 2022, the Human Resources leadership changed with Mitch Armbruster being named Chief Human Resources Officer. HR will continue to support the Foundation's strong history of very effective collaboration: across diverse teams within Purdue Research Foundation, with many Purdue University departments, with external companies, and with government agencies. It will be imperative for their team to build upon what has been established and ensure that everyone continue to adapt to meet the needs of the future.

HR is defining the future skill sets needed for the wide variety of roles across the Foundation, and the Department is planning for how, when, where, and by whom work will be accomplished. HR is working closely with Facilities and Information Systems to ensure team members have the best tools to accomplish their work, and HR will work to activate relationships to optimize communication, collaboration, and creativity.

#### HR is in the process of updating its technology to:

- Streamline talent acquisition to improve experiences for candidates and hiring managers
- Develop metrics that enable the assessment of the effectiveness of every aspect of the Department's efforts
- Enhance performance management processes
- Provide ways for the Department to assess engagement and employee well-being
- Enable the Foundation to optimize its affirmative action plans

It is also assisting Alliance Management and Placemaking as the Foundation works with external partners to build workforces of the future and make West Lafayette an attractive location for companies to establish their operations.

We are challenging team members to constantly be assessing what it means for them as individuals to be 'present' with their teammates and their customers. Regular in-person interactions create better working relationships and thus better results. They also spur spontaneous work-related conversations that would not otherwise occur.

MITCH ARMBRUSTER
CHIEF HUMAN RESOURCES OFFICER



## **Information Systems**

The Department of Information Systems provides IT support through both technical support and consulting to Purdue Research Foundation employees, startups, and established businesses in the Discovery Park District at Purdue and the Purdue Research Parks.

Moving from a remote work environment to a hybrid one introduced new challenges to the Department. Building on the successful implementation of Microsoft Teams as the Foundation's meeting platform in 2020, the Department brought remote staff together with those working in a conference room to improve collaboration and productivity. Also, to improve data accessibility, the Department developed a plan to transition to new security technologies in the 2022 calendar year.

Departmental leadership changed in 2021-22, with Ed Johnson named the Foundation's Vice President of Information Technology and McClure Services. Tom Long was promoted to

Director of Information Security and Tyler Johnson was promoted to Director of Information Technology.

"The team's strong work ethic and technical expertise has helped me make a smooth transition into my new role. I couldn't ask for a more prepared and professional group to lead," Ed Johnson said.

The Department's cybersecurity training program continued to empower Foundation staff with the tools needed to identify and report suspect emails and activity. As a result, the Foundation's security posture has improved across the enterprise.

"With the tools we have provided to employees, including cybersecurity training, we have enabled them to identify and report issues that can be handled via automation, which frees up IT's system and personnel resources," Tom Long said.

#### SALESFORCE BY THE NUMBERS

111,227 contacts
Almost 10,000 leads
Almost 5,000 opportunities

### **Marketing and Communications**

The Marketing and Communications Department tells the compelling stories and successes of Purdue Research Foundation. Through a strategic mix of traditional and emerging marketing channels, the Department leverages metrics and insights to drive messaging to its target audiences. From creative production and social media to digital marketing campaigns and media relations, the team develops tactics and campaigns to advance the vision and goals of the Foundation.

"Marketing and Communications made the strategic shift to an agency-style model. It provides our internal and external clients with a dedicated connection to the team, top-tier visual and written content, and delivery channels. Analytics show our clients are receiving above-industry-average response rates from their audiences. The new model has also strengthened the team's timeliness from ideation to execution and reduced duplication of efforts,"

said Kelly Nicholl, Vice President Marketing and Communications.

Through sponsored content in *The Wall Street Journal*, Marketing and Communications had three written pieces of high strategic importance placed in their digital publication. *The Wall Street Journal* served as a platform to reach C-suite executives and decision makers where 40% of their subscribers are from the C-suite. Delivered to over 13 million readers, the pieces highlighted the

development of Discovery Park District at Purdue as a Smart City, Hypersonic Ground Test Center as a new approach to hypersonics research and testing, and digital forestry technology to support digital information and sustainability.

The stories were targeted to strategic audiences across the U.S. and received more than 80,000 page views, which exceed benchmarks for active user engagement on their platform. As an additional bonus, the hypersonics story was chosen for a full-page printed advertorial with a circulation of over 700,000 subscribers.

Marketing and Communications saw a strategic opportunity to reinforce the Foundation brand, raise awareness, and control messaging on key topics for the Purdue ecosystem. The team used four GlobeNewswire distributions with an average potential reach of approximately 3.6 billion per story.



# BY THE NUMBERS:

#### LINKEDIN

Over 725% increase in engagement due to planned strategic placement and social media strategy

#### OTC DIGITAL CAMPAIGN

Targeted to Tech Scouts
80% increase
of traffic to the
Innovations page

#### E-MARKETING

Over 2 million
emails sent to
target audience
~37% higher
open rate
than industry standard

#### Purdue@WestGate

Purdue@WestGate, located in Odon, Indiana, is an economic development accelerator formed by a partnership between WestGate Authority, Naval Surface Warfare Center Crane (NSWC Crane), Purdue University, and Purdue Research Foundation.

It offers tools for startups, entrepreneurial experts, programs, educational opportunities, and workforce development to help southern Indiana businesses grow and thrive.

In 2022, Purdue@WestGate organized Autonomous Day 2.0 to bring together experts from industry, academia, and national security to explore the future of autonomous technologies through panel discussions and demonstrations.

"Our goal was to promote startup technologies and capabilities within the autonomous industry, and create opportunities and collaborations between higher education, Indiana businesses, and the national security industry. We showed the fun and interesting side of autonomous research with a mix of live demos, poster sessions, and panel discussions," said Samantha Nelson, Program Manager at the Purdue Foundry at WestGate.

Other strategic events hosted by Purdue@WestGate included Cybersecurity Day, Artificial Intelligence Day, and Manufacturing Day.

Also in 2022, NSWC Crane, a Navy federal laboratory in southern Indiana, signed an agreement with the Foundation to occupy 14,000 square feet of space at WestGate Academy.

The 15-year lease took effect in June. The space will be used for workforce development and other front door capabilities, such as the Small Business Office and the Technology Transfer Office. NSWC Crane's mission includes providing acquisition engineering, in-service engineering, and technical support for sensors, electronics, electronic warfare, and special warfare weapons.

The George Scalise Semiconductor Innovation Center (GSSIC) also works to bring companies into the Purdue@WestGate ecosystem. Its namesake is a Purdue graduate and well-known pioneer of the semiconductor industry. The GSSIC's goal is to innovate and collaborate to develop, test, and market manufacturing and supply chain excellence. GSSIC has offices in both Odon and West Lafayette.



# Purdue for Life Foundation

Stay connected. Get involved. Give back.

The Purdue for Life Foundation is the cornerstone for engagement, development, and stewardship at Purdue. Purdue for Life was established to deepen alumni ties, drive and coordinate all alumni-related activities across the Purdue family's post-graduation lives, and work with alumni and friends to garner support for the University. It advances the innovation, achievement, and growth of the University, including the important work underway on the Purdue Northwest and Purdue Fort Wayne campuses and through Purdue Global and the Purdue Polytechnic High Schools.

Purdue for Life's scope also includes alumni programming, lifelong learning, clubs and networks, President's Council, the John Purdue Club, the Office of Industry Partnerships, on-campus alumni living opportunities, and more.

The Purdue for Life Foundation existed only as an idea in 2019, when University leadership began exploring ways to merge engagement and fundraising activities in an effort to streamline the Purdue experience for alumni and donors.



Today, those first small steps have grown into

GIANT LEAPS

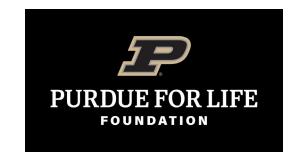
#### Among Purdue for Life's 2021-22 accomplishments:

- Set a Purdue fundraising record, with total dollars raised hitting an all-time-high \$542.1 million. This includes the \$68.2 million raised during our ninth annual Purdue Day of Giving—setting another record for most dollars raised for higher education through a single-day campaign.
- Held 125 Purdue for Life events, including 90 in-person events, with the number of attendees at each ranging from 10 to more than 5,000. The Boilermaker Ball and the Purdue Center for Cancer Research Challenge 5K were among them, together raising more than \$200,000 toward scholarships and cancer research.
- Continued to prioritize fundraising for two key initiatives—students and diversity, inclusion, and belonging—helping propel these areas to exponential growth. In student support, we raised nearly \$150 million in support—contributing to a 15% average annual growth rate over the past decade. Support for diversity, inclusion, and belonging, which recently averaged approximately \$3.5 million per year, has grown to an average of more than \$25 million annually in the last two fiscal years.
- Modernized Purdue Alumnus magazine into a new digital experience, allowing us to tell stories in deeper and more meaningful ways. Also, we've made the magazine available to all Boilermakers.

Relaunched Purdue Ties, our premier networking and mentoring platform. Nearly 11,000 Boilermakers have joined, with 3,000 expressing a willingness to mentor students and other alumni.

Enhanced our lifelong learning and alumni living offerings.
 Recognizing that the Purdue experience must include learning

and living opportunities, we now feature more than 120 lifelong learning offerings as well as a variety of ways to join Purdue's burgeoning neighborhood at Discovery Park District—an area that is quickly transforming the face of Purdue.





### Source Condominiums

On the east side of Airport Road in the high-tech Discovery Park District at Purdue, the Source condominium project will be situated across from a new, year-round residential community, Provenance.

Enjoy everything Purdue – athletics, university and cultural events, alumni activities, and campus amenities – all within walking distance from your very own Source condominium. The Beck Family Barn, a relocated and repurposed 100-year-old structure, will serve as the centerpiece of a vibrant social hub complete with restaurant and bar.

Designed specifically for friends, fans and graduates of Purdue, Source offers inviting and open one-level accommodations with between 1,516 and 3,009 square feet of living space. Plans feature two or three bedrooms, along with a limited number of larger, executive suites. No matter the floor plan, Source features luxury items as standard.



## **Connected Community**

In July 2022, Discovery Park District at Purdue was recognized as "Best in Future of Connectedness" by the International Data Corporation. The award was based on the district's novel approach to connectivity and its use of a neutral host technology infrastructure platform that brings advanced connectivity solutions and services to residents, retailers, companies, and innovators who live, work, and play in the district.

#### Lab-to-Life

The neutral host platform has also enabled the district to create an at scale, real-world, living lab called Lab-to-Life where IoT, 5G and 6G use cases, applications, business models, and technology can be demonstrated, evaluated, and optimized. Lab-to-Life is the "place in the middle" that bridges the gap between academic, and often theoretical science, and commercial application. The Lab-to-Life is a unique platform that helps to facilitate engagement and collaboration between corporate partners and the University's nationally recognized faculty and students.

#### **Innovation Partners Institute**

The Innovation Partners Institute (IPI) is an extension of the Lab-to-Life's "place in the middle" idea that goes beyond a physical place. The IPI is focused on applied application of science and technology that addresses local community challenges. These community-inspired use cases are opportunities to work collaboratively with corporate partners to go from zero to one. These public-private partnership project models often include joint funding and collaborative project definition. Through this approach, the IPI helps to validate and advance community solutions that have real-world impact while leaving commercial-scale deployment to its partners and collaborators.

Among its several projects was the West Lafayette Smart City Challenge, created from a partnership with the City of West Lafayette, the Indiana 5G Zone, and US Ignite. The competition empowered innovative teams to develop a scalable IoT solution to improve safety for vulnerable road users. The winners were a team of Purdue students called TRAWS: Traffic Real-time Analysis Weather System. Their IoT-based street sign platform delivers automated artificial intelligence/machine learning-derived messages based on various roadway conditions. The team earned \$10,000 and the opportunity to pilot its solution for the City of West Lafayette.

Other projects have included the use and application of technology for rural e-learning during the COVID-19 pandemic, reducing carbon in a heavy industry manufacturing setting, and advancing digital trust and data sovereignty in a local community.



# Accounting and Financial Reporting

Finance and Investments support all the activities of the Purdue Research Foundation and are involved in all the operations activities, compliance, and governance that allow the Foundation to function as a nonprofit corporation.

#### Office of Investments

The Office of Investments manages the combined Purdue University and the Purdue Research Foundation endowments as well as retirement assets.

All funds are managed according to the policies established by the Foundation's Board of Directors and its Finance Audit Committee.

As of June 30, 2022, funds under management, including endowed funds, trusts, annuities, and retirement funds, totaled approximately \$5.6 billion.

#### **Accounting and Financial Reporting**

The consolidated statements of financial position and activities for the fiscal year ending June 30, 2022, are presented.

The goal in managing the Endowment is to invest the assets in a way which, over a long period of time, achieves a return in excess of the spending distribution, inflation, and all expenses. We also have the imperative of accomplishing the first goal in a risk conscious way through diversification, fee management, etc.

DAVID C. COOPER
CFA, CAIA
CHIEF INVESTMENT OFFICER

# **Consolidated Statement of Financial Position**

June 30, 2022 (In Thousands)

		iotai
Assets		
Cash and cash equivalents	\$	35,081
Net accounts and other receivables		28,866
Right of use assets - operating leases		1,203
Investments	;	3,794,084
Notes receivable		32,318
Investments in affiliates		2,336
Net real estate		250,032
Net other assets and equipment		9,910
Interest in charitable perpetual trusts	_	<u> 16,781</u>
Total assets	<u>\$</u>	<u>4,170,611</u>
Liabilities and net assets		
Liabilities:		
Accounts payable and other accrued expenses		34,165
Due on split interest agreements		43,268
Net funds held as custodian		46,266
Net funds held for Purdue University	:	2,553,763
Bonds payable		48,540
Mortgages, notes payable, finance lease, and line of credit		129,673
Gift annuity payable		5,350
Lease liability		1,203
Other liabilities	_	320
Total liabilities	2	,862,548
Net assets:		
Without donor restrictions		299,688
With donor restrictions		1,008,375
Total net assets	1	,308,063
Total liabilities and net assets	\$	4,170,611

#### **Consolidated Statement of Activities**

June 30, 2022 (In Thousands)

Revenue and support	Without Donor Restrictions		With Donor Restrictions	Total
Amounts received for Purdue University research projects	\$ 534	\$	-	\$ 534
Payments to Purdue University	(534)	-	<u>-</u>	<u>(534)</u>
Contributions	11,298		101,975	113,273
Income on investments  Net unrealized and realized gains (loss) on investments	1,944 369		15,526 (75,295)	17,470 (74,926)
Gain on sale of real estate Change in value of split interest agreements	17,535 -		- 4,429	17,535 4,429
Decrease in interest in perpetual trust Administrative fees	- 37,269		(3,022)	(3,022) 37,269
Rents Royalties	21,665 5,556		-	21,665 5,556
Other Net assets released from restrictions	4,870 57,051		- (57,051)	4,870 
Total revenue and support	157,557		(13,438)	144,119
Expenses and losses Expenses for the benefit of Purdue University:				
Contributions to Purdue University Patent and royalty	42,954 3,635		-	42,954 3,635
Grants Services for Purdue University	656 2,907		-	656 2,907
Other Total expenses for the benefit of Purdue University	4,421 <b>54,573</b>		<u>-</u>	4,421 <b>54,573</b>
Administrative and other expenses:				
Salaries and benefits Property management	43,048 26,560		-	43,048 26,560
Professional fees Supplies	16,721 2,658		-	16,721 2,658
Interest Annuity expense	7,151 4,161		-	7,151 4,161
Research Park Other	732 8,997		- -	732 8,997
Total administrative and other expenses Total expenses and losses	110,028 164,601		-	110,028 164,601
Change in net assets	(7,044)		(13,438)	(20,482)
Net assets, beginning of period	306,732		1,021,813	1,328,545
Net assets, end of period	\$ 299,688	\$	1,008,375	<u>\$ 1,308,063</u>

#### **Administration**

Purdue Research Foundation is a nonprofit corporation administered by the professionals below who manage the day-to-day operations.

The areas of administrative concentration and the responsible individuals are:

**President** 

Brian E. Edelman

Chief Human Resources Officer
Mitch Armbruster

**Senior Vice President Commercialization Brooke L. Beier** 

**Chief Innovation and Collaboration Officer David A. Broecker** 

Chief Investment Officer David C. Cooper

Senior Vice President Alliances and Placemaking Gregory W. Deason

President and CEO, Purdue for Life Foundation Matthew D. Folk

Vice President of Information Technology and McClure Services Ed Johnson

**Vice President and Chief Facilities Officer Richard J. Michal** 

**Vice President Economic Development and Corporate Counsel Emily G. Najem** 

**Vice President Marketing and Communications Kelly H. Nicholl** 

**Chief Financial Officer and Treasurer** Scott W. Seidle Purdue Research Foundation prf.org

Technology Commercialization otc.prf.org

Purdue Foundry purduefoundry.com

Discovery Park District at Purdue discoveryparkdistrict.com

Purdue for Life Foundation purdueforlife.org





A production of
Purdue Research
Foundation
Marketing
and Communications
Department

Writers and Editors
Steve Martin
Writer/Publicist

Alicia South-Hurt Partner & Content Marketing Manager

**Designer**Liz Mogan
Graphic Designer

