

MESSAGE FROM THE PRESIDENT



**FRANCE A.
CÓRDOVA**

IN MY FIRST YEAR AS PURDUE'S PRESIDENT,

I am making many wonderful discoveries about the University. One of the most impressive things I have seen is the powerful impact the Technical Assistance Program has on the businesses, institutions, and people of Indiana. TAP has been remarkably successful in its mission to “strengthen the Indiana economy, improve the performance of companies and healthcare providers, and increase the quality of life for Indiana citizens.”

THE RESULTS ARE IMPRESSIVE.

During the 2006–2007 fiscal year, TAP served 413 companies and healthcare providers in 69 counties. Its efforts led to the creation of 547 jobs and had a total sales impact of nearly \$70 million. TAP continues to grow to meet the increasing demand for its services. It added 10 full-time employees during the past year and opened new offices in Kokomo and Rising Sun.

PROGRESS IS CONTINUING INTO THE NEW FISCAL YEAR. BEGINNING IN AUGUST 2007, TAP:

- Added offices in Jasper and Columbus. In both regions, local leaders initiated the efforts to provide start-up funding.
- Established PharmaTAP to bring about performance improvement and improve medicine safety in hospital and community pharmacies. This initiative is funded through a generous \$25 million Lilly Endowment grant to Purdue's College of Pharmacy.
- Doubled the size of its Energy Efficiency Services program, thanks to increased funding from the Indiana Office of Energy and Defense Development. This program helps Indiana's largest energy users identify and implement energy reductions.

This report will give you much more information on the accomplishments of this remarkable initiative. Like so many of Purdue's programs, TAP is a partnership of the University, the state, and local communities. Throughout its history, TAP has produced results that far exceed the financial investment we make.

I AM PROUD THAT PURDUE — BY LEADING THIS HIGHLY SUCCESSFUL EFFORT — IS MAKING INDIANA A BETTER PLACE TO LIVE AND DO BUSINESS.



France A. Córdova, President
Purdue University

INDIANA'S GROWTH AND PROSPERITY



Greater competitiveness, higher profits, enhanced customer satisfaction — whichever goal your company is aiming for, Purdue's Technical Assistance Program is here to assist. Our mission is to help Indiana companies function more efficiently and effectively, ultimately enhancing Indiana's economic development.

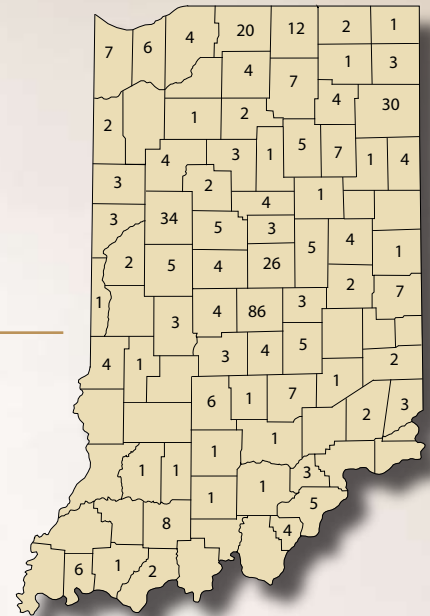
Leveraging the academic and industrial experience of Purdue faculty and staff, TAP meets the varied needs of Indiana businesses. We provide expert advice, professional training, and personal service to ensure that employers, employees, and the entire state benefit from our partnerships.

A highly trained workforce can spell economic success for your company and the state. Through TAP, your employees stay competitive, and Purdue graduates put their skills to work for you, right here in Indiana.

Increased sales:	\$38.9 million
Sales retained:	\$30.2 million
Cost savings:	\$6.2 million
Capital investment:	\$6.8 million

Jobs created or retained: 547

In 2006–07, TAP faculty, graduate students, and staff worked with 413 companies, hospitals, health departments, and governmental units across Indiana.



Funding Source	Amount
Program Income: Manufacturing	\$3,267,704
Workforce Innovation in Regional Economic Development (WIRED)	\$1,214,023
State Funding for Business Assistance	\$1,100,715
Indiana Economic Development Corporation (NIST Manufacturing Extension Partnership)	\$671,000
Other	\$374,523
Indiana State Department of Health	\$385,079
Office of Energy & Defense Development	\$129,000
Rising Sun Regional Foundation and City of Rising Sun	\$150,000
Program Income: Healthcare	\$279,000

MANUFACTURING EXTENSION PARTNERSHIP

GRIMMERSCHMIDT
COMPRESSORS, LLC
Franklin, Indiana

**GrimmerSchmidt
Compressors**





GrimmerSchmidt Compressors, LLC, whose products enhance oil and gas production, had experienced such rapid growth because of the energy boom that its backlog had doubled quickly. To meet increased demands within the confines of its current facility, executives asked TAP Manufacturing Extension Partnership consultants for lean advanced manufacturing training. Over three months the TAP advanced manufacturing specialists worked with Grimmer staff to embed new skill sets that were applied in small-batch manufacturing, cellular manufacturing, and other topics. After reorganizing the shop floor, reconfiguring machining centers, and adding some staff, the company has increased its monthly output about 60 percent, all without physical expansion.

“MEP consultants helped us choose the lean advanced manufacturing courses most relevant to optimizing our shop floor, which was our goal. They were very well educated, prompt, and stayed to our schedule, and they kept the classes entertaining and interactive. Our workers engaged in fictitious case studies, performing tabletop simulations and recording results. Once we all saw the benefits of the theories, we were able to apply the principles to our organization. Now we’re able to work with more efficiency.”

— Pete Grimmer, President
GrimmerSchmidt Compressors, LLC

TAP consultant Dietra Rosenkoetter assisted John Grimmer and Pete Grimmer in increasing the output of their compressor plant without physical expansion.



MANUFACTURING EXTENSION PARTNERSHIP

PERSONIX
Indianapolis, Indiana



A leading manufacturer of credit cards, healthcare cards, and financial and health document delivery services, Personix is integrating lean manufacturing principles into its core culture. To help accomplish that objective at its Indianapolis facility, TAP's Manufacturing Extension Partnership has created a multitiered training program for select employees. Already as a result of sessions on advanced manufacturing, culture change, and other principles, managers have seen increased production and better space utilization. Those intermediate accomplishments should go a long way toward realizing the company's ultimate goal of doubling capacity without increasing square footage.

"From my perspective, TAP has been critical to our success, primarily because of their absolute willingness to immerse themselves in our business. Primary consultant John Soeka has done what it takes to learn our culture and what we're trying to accomplish, and is extremely hands-on in training. John models the behavior of an expert lean manager, encouraging feedback from the floor and channeling employees' perspectives into workable ideas. That's really where the rubber hits the road for us, having a seasoned mentor and developing successful change agents."

**— Andy Platt, Process Improvement Leader
Personix**


TAP consultant John Soeka is assisting Personix executives Andy Platt and Kevin Wachtel in integrating lean manufacturing principles into their Indianapolis facility.

ENERGY EFFICIENCY SERVICES

ARCELORMITTAL USA
Burns Harbor, Indiana

In partnership with the Indiana Office of
Energy & Defense Development





ArcelorMittal is the world's largest steel company, with revenues of more than \$88 billion annually. But like other energy-intensive manufacturers, the company's U.S. operations are concerned with increasing energy costs and with the need to reduce greenhouse gases. Believing that energy efficiency is the fuel of the 21st century, executives consulted the Purdue Technical Assistance Program. TAP's energy efficiency experts facilitated training for ArcelorMittal technicians from across the country at its Burns Harbor, Indiana, facility. Part of the U.S. Department of Energy BestPractices program, the eight-day training educated staff on low- and no-cost optimization of existing systems.

"Pulling together technicians from across ArcelorMittal's U.S. operations for intensive training was no small task, but it has already produced results. Because of what he learned, one engineer realized that a 100-horsepower blower was redundant and could be turned off, producing expected electricity cost savings of \$50,000 a year. Of course, this is just the beginning. We anticipate our total energy cost savings as a result of the training will exceed \$5 million. These savings affect our bottom line and are sustainable."


— Eugene Arnold, Project Manager
ArcelorMittal USA

TAP consultant Ethan Rogers (left) worked with ArcelorMittal executives Larry Fabina and Eugene Arnold to train employees in how to reduce energy consumption.

FACULTY ASSISTANCE PROJECT

PETOSKEY PLASTICS
Hartford City, Indiana





Michigan-based Petoskey Plastics is a \$60 million global leader in the polyethylene film industry. For more than 25 years, the company has recycled post-consumer waste, putting the materials right back into the automotive seat covers, trash can liners, and other goods it produces. As the company prepared to open a new 300,000-square-foot bag production and recycling operation in Indiana, executives contracted with TAP to fine-tune their proposed production layout. The consultants' suggestions improved efficiencies and ultimately helped the company obtain expansion funding from the state.

“Right now we’re moving a minimum of 50 to 70 trucks in and out of our Hartford City facility, and when we’re running at full capacity it will probably be 150 to 200 trucks. Even though we had a plan in our heads, we needed expert advice on the material flow necessary to make that work. By looking at the volume of product coming in, TAP consultants came up with different ways to fill up the facility and empty it back out again.”


— Steve Smith, Director of Production
Petoskey Plastics

“TAP graduate assistant Amir Noorinaeini (right) and Professor Mark Lehto (second from right) assisted Petoskey Plastics executives Steve Smith and Mike Foster with the layout of their new Indiana facility.”

FACULTY ASSISTANCE PROJECT

JINSITEC, LLC
Indianapolis, Indiana





Della Jules and Yvette Jules founded Jinsitec, LLC, on the premise that they could improve people's lives. But to push their innovative medication timing devices through a crowded marketplace, they also needed segmented target markets, appealing packaging, and a savvy logo. They got just those elements by collaborating with TAP's industrial design and business consultants. Now, the sisters are talking to a manufacturer in China, courting a major pharmaceutical chain, and discussing partnership opportunities with the Zimbabwe government — milestones they attribute in part to the fine-tuning that TAP provided.

“Once we found out about the Technical Assistance Program, it was clear that they could help position our start-up in the marketplace. By taking our designs and modernizing them, they helped our eyes to really see things differently. Visual appeal is everything in attracting customers to our product. The designers really captured that in both our product and logo designs — even if you don't need our medication reminders, you just want them. We've been thrilled with what the TAP consultants have done for our company.”

— Della Jules, Director of Business
Development and Planning
Jinsitec, LLC

To push their innovative medication timing devices through a crowded marketplace, Yvette Jules (left) and Della Jules (right) enlisted help from TAP consultants Charlene Sullivan and Scott Shim.

HEALTHCARE TECHNICAL ASSISTANCE PROGRAM

TIPTON HOSPITAL
Tipton, Indiana





Like many small-town hospitals, Tipton Hospital prides itself on the personal attention that staff and physicians can offer patients. But with only one endoscopy lab available, the hospital was facing longer-than-optimal wait times, which were impacting patient satisfaction and creating staff downtime. Working with Healthcare TAP consultants, administrators determined how to add a second endoscopy lab so that staff could prep patients in one room while another patient was already undergoing a procedure. Once the renovation is complete, the hospital anticipates greater efficiency and ultimately higher satisfaction.

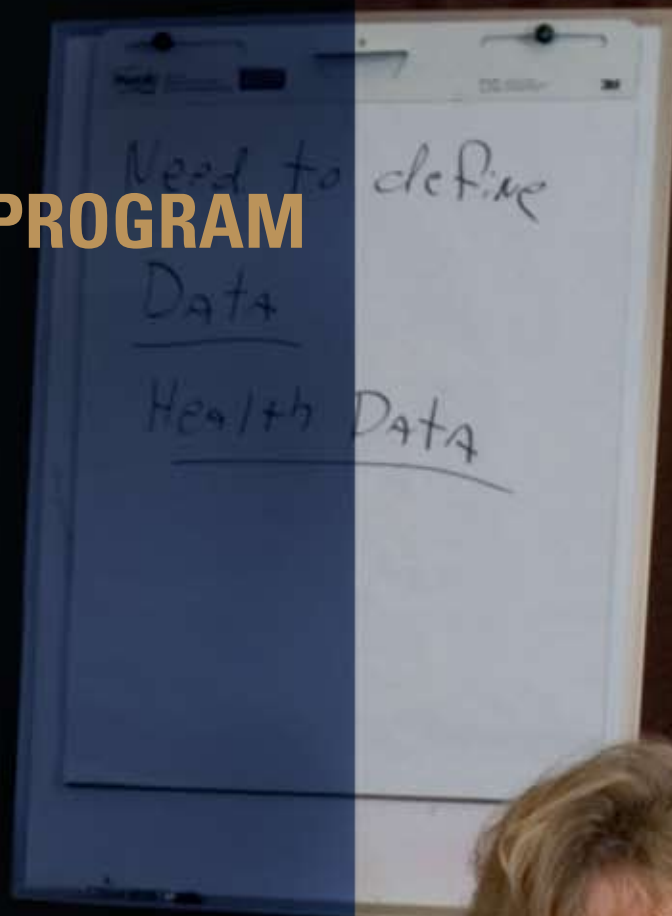
“Our endoscopy lab is attractive and our equipment is up-to-date, but we haven’t remodeled its patient flow in 10 years. Working with Healthcare TAP’s clinical, engineering, and business experts, we examined the process from all aspects. The redesigned clinical area should eliminate many of our inefficiencies, creating a more patient-focused environment that will accommodate greater volume as we expand. By being exceedingly easy and flexible to work with, the Healthcare TAP consultants made the planning phase go smoothly for our hospital.”

**— Dr. Carl Pafford BS '95,
Vice President, Operations
Tipton Hospital**

Healthcare TAP consultants Pat Coyle-Rogers and Rodney Vanderveer helped Dr. Carl Pafford and his colleagues at Tipton Hospital in redesigning the endoscopy suite.

HEALTHCARE TECHNICAL ASSISTANCE PROGRAM

HOWARD COUNTY PUBLIC
HEALTH DEPARTMENT
Kokomo, Indiana





Providing people with necessary public health services is a complex issue requiring clinical, business, and government expertise. To help 20 pilot counties determine their specific needs, the Indiana State Department of Health invited them to participate in its Indiana Public Health System's Quality Improvement Project. Healthcare TAP consultants helped to facilitate this process in Howard County. Meeting with county representatives, the consultants led the group in team-building exercises, root-cause analysis, and development of goals and objectives for top county priorities, such as childhood obesity.

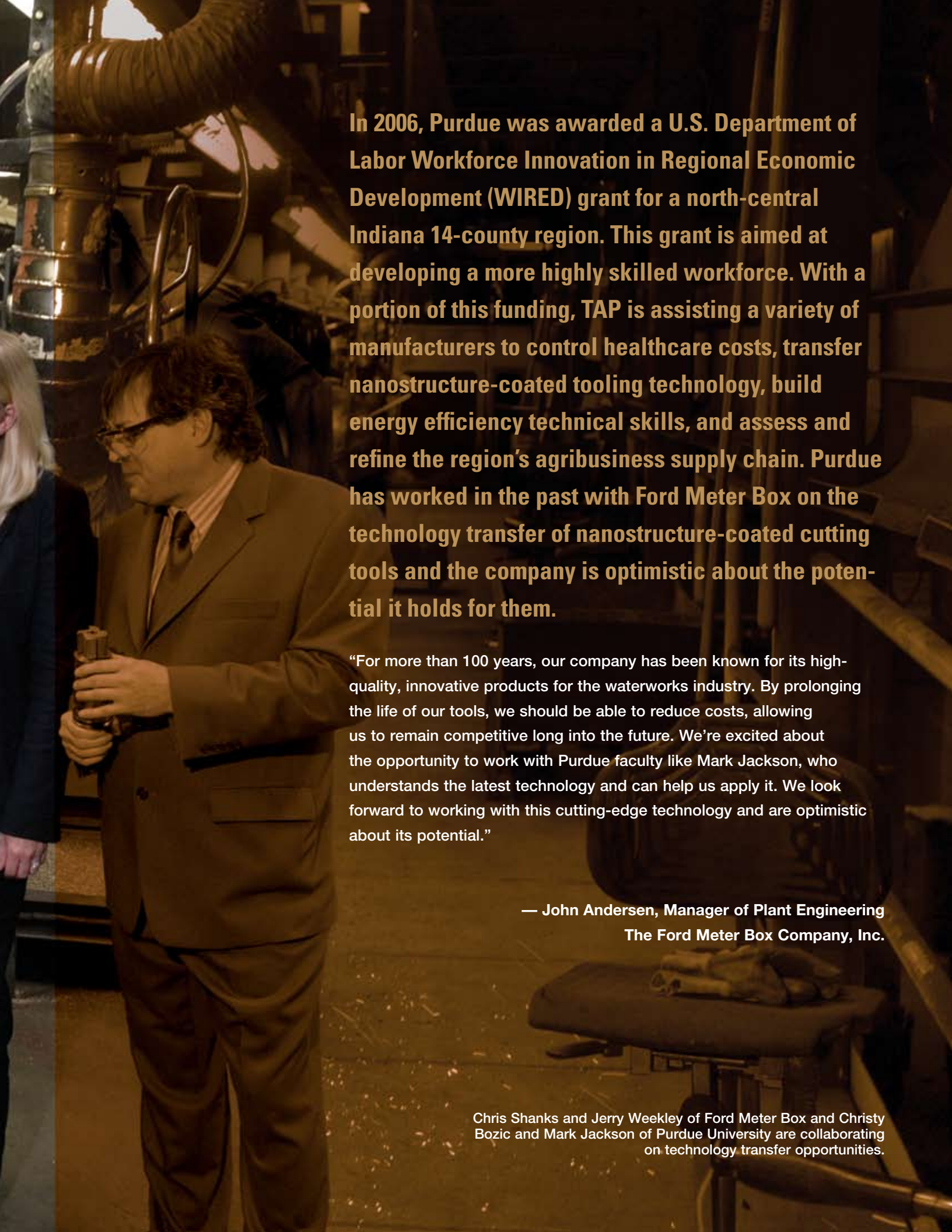
"Partnering with Healthcare TAP has been really beneficial to us, because we've been able to narrow our focus down to some things we can take action on. As public health professionals, we tend to try to tackle all the problems of the world. Using the industrial model the consultants have taught us, we're learning how to accomplish our goals through consensus building and efficiency planning. Now, we can look at an issue and bring in all the surrounding factors, and then work on accomplishing one part."

— Kris Conyers, RN, MSN, Administrator
Howard County Health Department

WORKFORCE INNOVATION IN REGIONAL ECONOMIC DEVELOPMENT [WIRED]

THE FORD METER BOX COMPANY, INC.
Wabash, Indiana



A man in a dark suit and glasses is holding a small, cylindrical metal part. He is standing in a factory or industrial setting, with large machinery and pipes visible in the background. The lighting is warm and slightly dim, creating a professional and industrial atmosphere.

In 2006, Purdue was awarded a U.S. Department of Labor Workforce Innovation in Regional Economic Development (WIRED) grant for a north-central Indiana 14-county region. This grant is aimed at developing a more highly skilled workforce. With a portion of this funding, TAP is assisting a variety of manufacturers to control healthcare costs, transfer nanostructure-coated tooling technology, build energy efficiency technical skills, and assess and refine the region's agribusiness supply chain. Purdue has worked in the past with Ford Meter Box on the technology transfer of nanostructure-coated cutting tools and the company is optimistic about the potential it holds for them.

“For more than 100 years, our company has been known for its high-quality, innovative products for the waterworks industry. By prolonging the life of our tools, we should be able to reduce costs, allowing us to remain competitive long into the future. We’re excited about the opportunity to work with Purdue faculty like Mark Jackson, who understands the latest technology and can help us apply it. We look forward to working with this cutting-edge technology and are optimistic about its potential.”

— John Andersen, Manager of Plant Engineering
The Ford Meter Box Company, Inc.

Chris Shanks and Jerry Weekley of Ford Meter Box and Christy Bozic and Mark Jackson of Purdue University are collaborating on technology transfer opportunities.

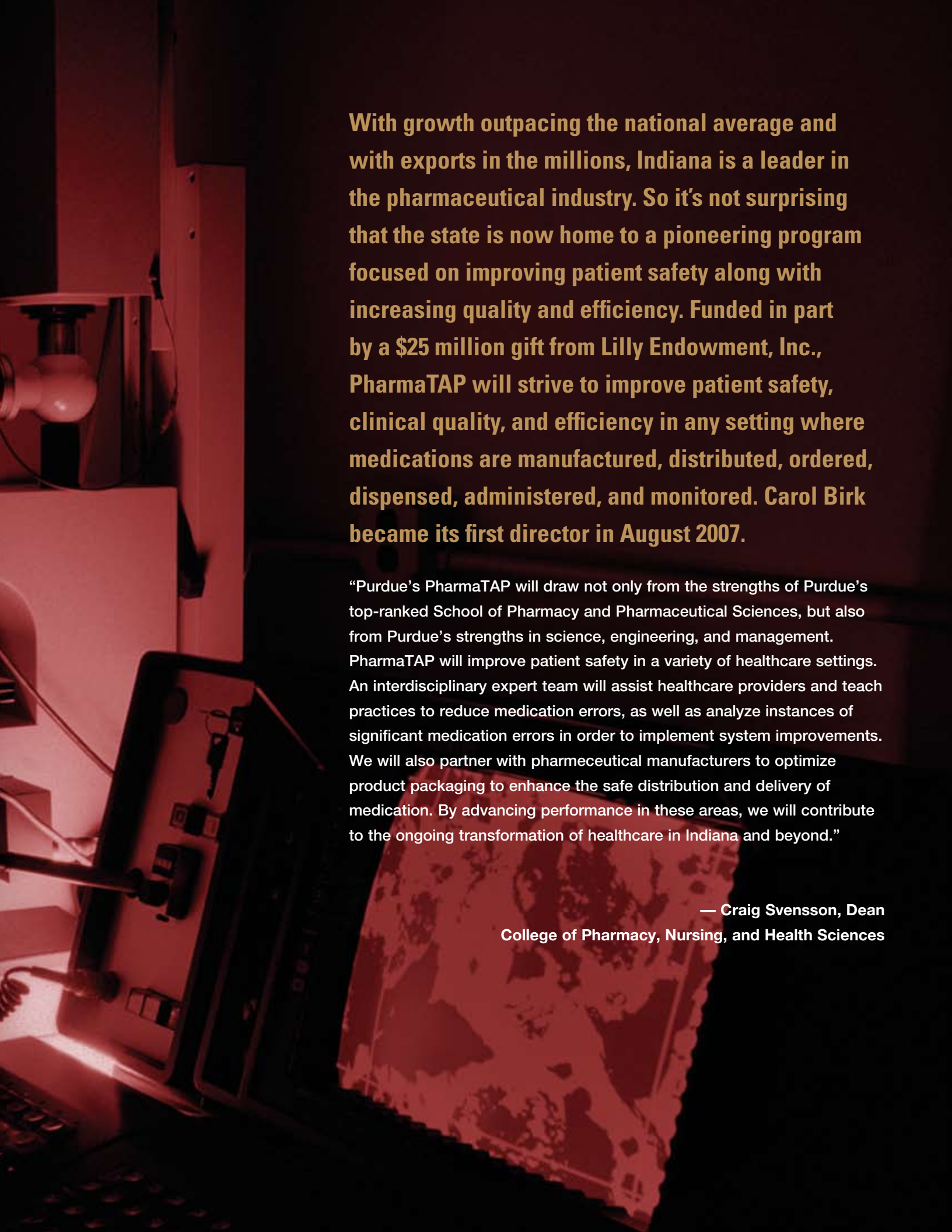
PHARMATAP

An engagement program of the Purdue School
of Pharmacy and Pharmaceutical Sciences
and the Technical Assistance Program



CAROL BIRK,
DIRECTOR





With growth outpacing the national average and with exports in the millions, Indiana is a leader in the pharmaceutical industry. So it's not surprising that the state is now home to a pioneering program focused on improving patient safety along with increasing quality and efficiency. Funded in part by a \$25 million gift from Lilly Endowment, Inc., PharmaTAP will strive to improve patient safety, clinical quality, and efficiency in any setting where medications are manufactured, distributed, ordered, dispensed, administered, and monitored. Carol Birk became its first director in August 2007.

"Purdue's PharmaTAP will draw not only from the strengths of Purdue's top-ranked School of Pharmacy and Pharmaceutical Sciences, but also from Purdue's strengths in science, engineering, and management. PharmaTAP will improve patient safety in a variety of healthcare settings. An interdisciplinary expert team will assist healthcare providers and teach practices to reduce medication errors, as well as analyze instances of significant medication errors in order to implement system improvements. We will also partner with pharmaceutical manufacturers to optimize product packaging to enhance the safe distribution and delivery of medication. By advancing performance in these areas, we will contribute to the ongoing transformation of healthcare in Indiana and beyond."

**— Craig Svensson, Dean
College of Pharmacy, Nursing, and Health Sciences**



SUMMER INTERN PROGRAM

BAXTER BIOPHARMA SOLUTIONS
Bloomington, Indiana

Purdue interns Nikhil Atreyesh, Megan Englert, Sorraya Khiwnavawongsa, Vamsi Bommakanti, and Ca Do helped Baxter BioPharma Solutions implement lean manufacturing and Six Sigma principles into its Bloomington facility.

For several decades now, total quality management — and more recently, lean manufacturing and Six Sigma — has helped Baxter BioPharma Solutions to optimize resources, maximize profits, and enhance customer satisfaction. Since acquiring an aseptic filling facility in Bloomington in 2001, Baxter has been taking the plant on that same quality journey. This past summer, Baxter hired six Purdue interns to assist them in the process. By collecting data and conducting time studies, these bachelor's, master's, and doctoral students have collaborated to help improve documentation flow, reduce idle time, and eliminate waste.

“Historically, industrial engineers are the experts in the area of lean manufacturing, and Purdue is the only university within 100 miles offering industrial engineering and industrial technology-related degrees. The interns we have hired from Purdue not only have the textbook background in these principles, but can also apply those ideas to real manufacturing situations. I feel fortunate that I was able to get that caliber of people; they have paid for themselves many times over, and we hope to have some of them back for permanent positions.”

— Bradley Yowell,
Operational Excellence Project Leader
Baxter BioPharma Solutions



HIGH TECH JOB FAIR FOR INDIANA COMPANIES

LANDIS+GYR
Lafayette, Indiana

Through TAP's annual High Tech Job Fair, Landis+Gyr hires Purdue graduates like Abhishek Mehra for key technical, engineering, and managerial positions.

Landis+Gyr is a technology-driven company that leverages advances in smart metering, communication technologies, and other environmentally friendly initiatives serving the electric energy industry. Striving to become the industry leader, the company manufactures, markets, and delivers state-of-the-art electric meters and power management and measurement solutions. Based on founder Thomas Duncan's long-standing support of Purdue's College of Engineering, the company employs Purdue graduates in key technical, engineering, and managerial positions. TAP's annual High Tech Job Fair has strengthened that relationship by linking executives with hundreds of students in a single event.

"We view Purdue University as a world-class institution that does an outstanding job of preparing their graduates to step into the workforce and contribute immediately. Our experience with Purdue graduates has been extremely positive. Students and graduates come technically prepared and are knowledgeable about recent technological trends. They bring fresh ideas and approaches to the way we do business. We have asked some recently hired software and electrical engineers to step in and fill some big shoes, and they have performed admirably."

— Jerry Figurilli, COO
Landis+Gyr

EXPERTISE FOR ANY NEED

TAP offers training and technology implementation on a funded basis. Offerings include:

- Lean manufacturing and workforce transformation
- Quality systems and certifications
- Team building, problem solving, and leadership training
- Business growth idea creation
- Customized training for the healthcare and pharmaceutical sectors
- Energy reduction and training

TAP provides up to five days of free, confidential assistance on a full range of business and technical issues, including:

- Advanced manufacturing
- Business management and strategy
- Data analysis
- Environmental health and safety
- Facility addition and layout
- Human resources
- Information technology and security assessments
- Material selection and part failure analysis
- Product design, engineering, and rapid prototyping

** TAP does not support projects involving litigation. Projects involving the development of intellectual property require written contracts.*



David R. McKinnis
Director and Associate
Vice Provost for Engagement
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THE HTAP ADVANTAGE

Healthcare TAP provides short-term performance improvement assistance and lean and Six Sigma healthcare training for Indiana hospitals, the public health system, and other healthcare providers. These services already have resulted in immediate benefits to patient care, productivity, quality, and safety.

TAP PARTNERS

TAP partners with many governmental, public, and private organizations including:

- Indiana Economic Development Corporation
- Indiana Workforce Development
- Indiana State Department of Health
- Indiana Office of Energy and Defense Development
- NIST Manufacturing Extension Partnership (MEP)
- U.S. Department of Labor
- Centers for Disease Control and Prevention
- U.S. Economic Development Administration
- Lilly Endowment
- Indiana Hospital & Health Association
- Rising Sun Regional Foundation
- City of Rising Sun
- Kauffman Foundation
- Columbus Economic Development Board
- Dubois County Area Development Corporation
- Vincennes University
- Ivy Tech Community College

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TECHNICAL ASSISTANCE PROGRAM

A YEAR IN REVIEW JULY 2006–JUNE 2007



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A vertical blue graphic on the left side of the page. It features a glowing globe with a grid pattern, surrounded by abstract geometric shapes and light rays, creating a sense of global connectivity and technology.

TECHNICAL ASSISTANCE PROGRAM

A YEAR IN REVIEW JULY 2006–JUNE 2007