

The Office of the Associate Vice President for Engagement is working to create mutually beneficial partnerships between Purdue and Indiana citizens, industry, agriculture, education and government. The goal is to ensure that the state realizes the maximum possible advantages from Purdue's many resources. The office works directly with Indiana's leaders, business community and citizens to find ways for Purdue to expand partnerships and economic opportunities in the state and globally. The following are examples of the many ways in which Purdue Engagement efforts work to improve the quality of life for Indiana's people.

Economic Development

- **Technical Assistance Program** - advances Indiana's economic prosperity, health, and quality of life. TAP supports performance improvement and technology adoption through programs and services that utilize nearly 200 faculty, students, and staff in nine statewide offices. Employees served include companies, hospitals, health departments, physician practices, and governmental units throughout the state. Impacts are considerable. In the year ending June 2012, TAP assisted 900 organizations, trained over 5,400 employees, boosted sales by \$67 million, increased capital investments by \$32 million, contributed to cost savings of \$15 million, and saved or added over 1,800 jobs in the state, according to the organizations that were assisted.
- **Center for Regional Development** - develops advanced tools and provides training and technical assistance that enable Indiana's entrepreneurs, communities, and regions to compete in the global economy. PCRD provides support for civic leaders as they build their economies through education and workforce development, innovation and entrepreneurship support, physical planning, and leadership development. Since its founding in 2006, collaborations designed and guided by PCRD have trained over 2,300 entrepreneurs, assisted over 4,000 businesses start or grow, helped over 16,000 Hoosiers gain new workforce skills, developed five new training or certificate programs, including the nation's first certificate in sustainable manufacturing, helped interest nearly 12,000 high school students into STEM education, and engaged over 1,300 civic leaders in civic collaboration training. PCRD's internationally recognized approaches to building civic collaborations have led to PCRD engagements in 30 states and in Canada. The Center's work in building sophisticated analytical tools for cluster- and innovation-based economic development has won national awards and recognition.
- **Purdue Research Park** - is home to the largest university-affiliated, state-of-the-art business incubator in the nation and is Indiana's first certified technology park. Life sciences, information technology and advanced manufacturing ventures make up the majority of the more than 145 businesses located on the park's 725 acres in West Lafayette, IN.
- **Office of Technology Commercialization** - administered by the Purdue Research Foundation, is responsible for the commercialization of intellectual property developed by Purdue and for supporting many of the start-up companies that are based on Purdue technologies.
- **Center for Advanced Manufacturing** - facilitates research-based collaborations with Indiana, national, and multinational manufacturers interested in advancing their people, products, or processes. The center serves as the central point of contact at Purdue University, providing industry with a variety of engagement and research options to meet the technical needs of each business. The center also seeks to engage and inform manufacturers via speaking engagements and manufacturing summit series.
- **Indianapolis Engagement Office** - serves as central Indiana's main outreach liaison for business and industry partnerships with the University. This office represents Purdue's Technical Assistance Program, Purdue Healthcare Advisors, Purdue Research Park's high-tech business incubation complex, Discovery Park, Purdue's Statewide Technology Program, and Purdue's Gateways Program, which assists high-tech startup companies in the Research Park. Working closely with an alliance of Indiana business and research university leaders called the Central Indiana Corporate Partnership to promote economic development and business expansion, the office connects the capabilities of the University with businesses, entrepreneurs, organizations, and government entities for the purpose of economic development and business expansion. The office also maintains close partnerships with the Indiana Health Industry Forum, the Indiana Chamber of Commerce, the Indiana Manufacturing Association, and the Indiana Motorsports Association.

- **IPFW Office of Engagement** - is a partnership between the regional business community and three universities: IPFW, Purdue University and Indiana University. Its mission is to match the resources, expertise and intellectual property of the partner universities to the regional needs of northeast Indiana to enhance economic development, workforce development and quality of life initiatives for the region. Since the inception of the office in January 2006, over 450 businesses and organizations have been served with over 40% successfully completing value-added engagements with one or more of the universities.

P-12 Education

- **Indiana Science Technology Engineering Mathematics (I-STEM) Resource Network** - is an unprecedented collaboration between public and private higher education institutions, K-12 schools, business, and government. I-STEM partnerships provide access to educational content experts and practitioners who come together to design and employ programs to address statewide K-12 STEM education issues. I-STEM supports K-12 teachers and leaders to implement high academic standards towards STEM literacy for all students. Examples of I-STEM programs include the Middle Level Mathematics Initiative that provided graduate courses for over 600 teachers to help them prepare student for rigorous mathematics studies starting in high school. I-STEM's Indiana Science Initiative is systemically improving science education through the use of research-based K-8 science curricular materials enhanced with literacy education. Currently over 130 schools representing over 1,900 teachers and over 53,000 students are involved in the initiative.
- **Science Bound (SB)** - administered by the Office of Diversity and Inclusion, is a partnership among Purdue, the Indianapolis Public Schools and the Indianapolis business community. It provides eligible students an opportunity to earn a full tuition scholarship to Purdue to pursue a degree leading to an agriculture, engineering, science or technology-related career. The program has grown to more than 200 middle and high school students. The students participate in science and engineering related after-school activities, field trips and summer camps to enrich their academic experience.
- **Project Lead the Way** - is a pre-engineering/engineering technology program for high school students. It offers a four-year sequence of technology education courses which, when combined with college preparatory mathematics and science courses in high school, introduces students to the discipline of engineering and engineering technology prior to entering college. Sponsored in part by Purdue, this exploratory curriculum focuses on design, electronics, automation and engineering mechanics. Project Lead the Way is offered in more than 3,000 schools in 50 states and the District of Columbia. With 300 Indiana schools participating, Indiana boasts the highest number of schools enrolled. The Department of Industrial Technology at Purdue accepts Project Lead the Way class credits.
- **STEM Goes Rural** - is a collaborative, cross-disciplinary initiative dedicated to partnering with the rural schools of Indiana. Purdue's STEM Goes Rural Fellows are part of a larger partnership among Indiana, the Woodrow Wilson Foundation, the Eli Lilly Foundation, and four Indiana Universities. Indiana was the first state to launch the Woodrow Wilson Fellowship as a strategy to provide Indiana with a 25% annual increase in the supply of STEM educators in high-need schools. This year alone, 31 STEM Goes Rural graduates are reaching more than 3,250 students daily in 29 communities in rural schools throughout the state. Purdue is currently preparing nine more future STEM educators for rural school employment in fall 2013. STEM Goes Rural is the first Woodrow Wilson fellowship program to focus on the acute shortages of highly qualified STEM educators in rural areas. Purdue currently partners with 61 Indiana rural school corporations to provide planning input, and clinical experiences for the program.
- **P-12 Portal** - serves as the online hub for all preschool through grade 12 events, programs and activities as well as professional development for P-12 educators. The searchable database includes activities such as summer camps for kids, workshops for teachers, college fairs for high school students, activities for schools, and more. www.purdue.edu/p12portal

Engagement

(continued)

- Center for Literacy Education and Research (CLEAR)** - provides professional development to K-12 teachers that focuses on literacy teaching and learning. In 2011, CLEAR provided targeted professional learning on Purdue's campus to 104 teachers in 29 districts across Indiana. Two districts contracted with CLEAR to provide tailored professional development to a total of 50 teachers. In 2012, CLEAR has expanded its reach to include providing professional development through six of Indiana's Education Service Centers to impact an even larger number of teachers and administrators.
- College of Science K-12 Outreach Programs** - work with pre-college students and teachers to increase interest and achievement in science and mathematics. Science K-12 Outreach offers professional development for teachers, such as Inquiry Science workshops and Technology Integration in the Classroom. It also offers student programs such as Focus on Science and Math Field Day that demonstrate scientific and mathematic principles in fun and exciting ways. More than 10,000 teachers and 600,000 students throughout Indiana have benefited from Science K-12 Outreach activities.
- College of Veterinary Medicine P-12 Outreach Programs** - work with students, teachers, and families to provide educational opportunities for P-12 students, parents, teachers, and the public about the science involved in keeping people and their animals healthy. In 2011, Boiler Vet Camps – weeklong residential summer camps – hosted 90 students entering grades 8 to 12. Boiler Vet Clubs for kids are nearly 400 members strong. In 2011, Purdue Veterinary Medicine (PVM) began two free monthly community programs. PVM Family Programs, evening presentations for families with children of all ages, highlight the breadth of careers in veterinary medicine. PVM Group Educational programs offer interactive activities for groups of 25 elementary, middle, and high school students. Over 220 parents and students participated in these new programs in 2011. PVM collaborates with the Discovery Learning Research Center, College of Education, Agricultural Communication, College of Health and Human Sciences, Science Bound Program, and four public schools in Indiana to develop and deliver the NIH SEPA-supported *Fat Dogs and Coughing Horses* program. The program consists of curricula for 1st, 2nd, 3rd, 6th, and 9th grade students, four children's books, professional development programs for teachers, and four traveling exhibits. Six teachers at four Indiana schools delivered the curricula to their students in 2011. Over 50 teachers participated in professional development programs. More than 5,000 books were distributed, and two exhibits traveled to the Indiana State Fair and Minnetrista. Also in 2011-2012, PVM Ambassadors, students in the College of Veterinary Medicine, in collaboration with Purdue University's Office of Engagement, Scholastic, and Hanna Community Center brought 55 children and mentors to the Indiana State Fair, and launched a literacy program that delivered nearly 200 free books to children participating in Hanna's after-school program and summer camp.
- Biology Olympiad** - held at Purdue for the past three years, prepares 20 finalists to participate in the USA Biology Olympiad (USABO) National Finals. The finalists are selected from over 10,000 registrants based upon USABO examination scores. The selected students spend two weeks at Purdue in intensive preparation for the theoretical and laboratory examinations. Faculty from Purdue and several other universities teach the students. Team USA members have earned gold medals at the last six International Biology Olympiad Competitions. Biology Olympiad is co-sponsored by the Center for Excellence in Education and Purdue University's Office of Engagement.
- Indiana Council for Economic Education** - is a state-wide program based at Purdue University (www.econed-in.org). An affiliate of the National Council on Economic Education, ICEE oversees 11 University Centers, which offer workshops and programming for K-12 teachers interested in learning how to integrate basic economic concepts into their classroom curriculum. ICEE provides teachers curriculum materials and offers graduate-credit and other workshops featuring business, labor and agricultural leaders.
- Indiana 4-H Youth Program** - uses resources from the USDA, Purdue and other land-grant universities to conduct hands-on educational programs for children from 3rd to 12th grade. Led by volunteers under the direction of the Purdue Cooperative Extension Service, 4-H is the largest youth-serving organization in the country. It sponsors fairs and other programs in both urban and rural settings that help children throughout Indiana develop leadership, citizenship, communication and decision-making skills that can be applied throughout a lifetime.

- Academic Competitions** - administered by the Indiana Association of School Principals, are sponsored by Purdue. Spelling and math competitions involve teams of elementary, middle-school and high-school students; "Super Bowls" involve teams of middle-and high-school students competing in English, math, science, fine arts and social studies categories. In statewide academic decathlon events, teams of high school students compete through tests, essays, speeches and interviews to advance to a national competition. Purdue assists with hosting, question writing, presenting awards and providing promotional and technical assistance.
- Purdue Athletes Life Success Program (PALS)** - funded by the Brees Dream Foundation and others, PALS provide sports, fitness, and health instruction to area youth ages 8-14, from throughout Tippecanoe County. The children also receive free health, speech and hearing screenings. The program stresses social responsibility and healthy self-esteem. Special events such as a family night, career day, and service learning also are incorporated into the program. More than 500 children attend the five week program each year.

Service Learning and Community-based Experiential Learning

- Engineering Projects in Community Services (EPICS)** - Purdue's largest service learning program, enables engineering students to weave volunteerism into their classroom experience. Teams of undergraduates earn academic credit for multyear, multidisciplinary projects that solve engineering- and technology-based problems for community service and educational organizations. Programs based on the Purdue model are operating at 20 other universities in the United States.
- Purdue Liberal Arts Community Engagement (PLACE)** - is an engagement effort in the College of Liberal Arts that offers a variety of opportunities for faculty to bring their expertise and knowledge to the wider community and to work collaboratively across disciplines and with community leaders to address complex issues in the community. PLACE supports three overlapping and mutually reinforcing programs—Building Community, Public Square Forum, and Individual Engagement. Each program brings the expertise of Liberal Arts scholars and artists to bear on significant challenges to public life and fosters synergy among discovery, learning, engagement, and civic responsibility. Through Building Community, faculty and students study community issues from multiple disciplinary perspectives and share research findings twice a year with the Community Advisory Board. Public Square Forum consists of a series of events focused on one subject to enrich public understanding of an issue of concern. Individual Engagement extends expertise of faculty to Indiana's citizens through public presentations, performances, and workshops.
- The Community Service Student Grant Program** - provides grants to Purdue students or student organizations for community service student-learning projects. In 2011, over 180 student grant projects were awarded across campus.
- Boiler Volunteer Network** - links students, staff and faculty with volunteer opportunities to connect with community service projects throughout Lafayette and West Lafayette.
- Statistics in the Community (STATCOM)** - is a volunteer community outreach organization directed and staffed by graduate students within the Department of Statistics. It offers free professional consulting services to governmental and non-profit groups. Assistance is available on a wide variety of statistical issues including using data to improve decision making processes, designing and analyzing surveys or experiments, identifying and visualizing trends and associations in data, making predictions and projections, and finding meaningful information when large amounts of data are available.
- Office of Admissions** - Each year, Admission staff and alumni volunteers travel across the country, meeting with students who are interested in the educational opportunities at Purdue. Between August 2011 and July 2012, Purdue representatives attended nearly 850 college fairs, visited more than 900 high schools and hosted 80 off-campus receptions. In addition, Admissions staff coordinated or attended nearly 30 youth outreach programs as well as 15 programs for youth advisors. These outreach activities are designed to empower students with information and resources to help them prepare for college admission and success.

Source: Office of Engagement

Engagement

(continued)

- **Speakers Bureau** - arranges speaking engagements for more than 830 Purdue faculty and staff. Speakers address many different topics, ranging from economic development and technology transfer to social media, stress management and leadership. While some speakers charge a fee, the services of the Speakers Bureau are provided free of charge.

Advance Quality of Life for all Constituents

- **Purdue Extended Campus** - provides an extensive array of continuing education, professional development, and workforce development opportunities. Working together with faculty from a wide range of academic disciplines, PEC administers conferences, classes, degree programs, and noncredit activities throughout the year, including evenings and weekends, on the West Lafayette campus, at off-campus locations, and online to serve learners around the world. Each year Purdue hosts about 700 conferences for approximately 70,000 attendees with a direct economic impact for our region of about \$9 million. Approximately 30,000 enroll in Purdue noncredit educational activities. Approximately 200 working professionals earn Purdue degrees or certificates annually by distance learning or blended programs.
- **Statewide Technology Program** - enables students to earn associate's and bachelor's degrees at seven locations across the state in fields such as aviation management, engineering technology, computer technology, computer graphics, industrial technology and organizational leadership and supervision.
- **The Graduate School** - The Graduate School offers more than 100 degree programs through five campuses in Indiana, giving graduate students the opportunity to engage in campus-based, online, and international research and academic study that impact both our local and global community. Graduate School alumni currently live and work in all fifty states and more than 140 countries worldwide, literally transferring Purdue knowledge around the globe.
- **Center for Medication Safety Advancement** - is the College of Pharmacy's center of excellence for discovering and delivering innovative safe medication use practices. Founded through the support of a Lilly Endowment Grant, CMSA has become financially self-sustaining through their extensive outreach work. Our footprint is considerable, and since 2010, CMSA programs, research, and education have trained over 8,000 healthcare professionals and students in nearly every state in the US and several countries abroad.

International Engagement

- **Partnership with Moi University in Kenya** - Purdue's College of Pharmacy, Nursing and Health Sciences has been involved with Moi University in Kenya for a number of years. The connections are being strengthened and deepened. Purdue's expertise in agriculture and water resources is expanding the work already being done by IUPUI and IU, so that all three of Indiana's flagship universities will collaborate in a long-term partnership with Kenya. Through this engagement, Purdue faculty and students have meaningful opportunities to work with Kenyan communities for mutual benefit.
- **Go Purdue Educational Exchange Program** - is a program that provides international student speakers for public and private schools, civic groups, businesses, and other entities in the Lafayette-West Lafayette community. Students share various aspects of their cultural heritage upon request. Areas include history, customs, dress, holidays, language, sports, and other topics.
- **Global Business Engagement (GBE)** - is an initiative that draws on Purdue's multiple strengths and international resources in order to grow international business connections, while supporting Purdue's learning and discovery missions. By systematically leveraging Purdue's assets (including students, faculty, alumni, technology, research parks, training, services, and relationships with foreign universities) GBE works to generate more foreign investment and trade for Indiana. GBE has held international business expansion workshops for hundreds of Indiana executives, organized major foreign official delegations to Indiana, led Purdue delegations to China, assisted Research Park firms enter China, designed foreign technology development initiatives and supervised student teams to help Indiana firms develop China strategy. GBE's online system www.gbe.purdue.edu helps Indiana firms find foreign partners and access Purdue's business development services.

Source: Office of Engagement

- **U.S. China EcoPartnership for Environmental Sustainability (USCEES)** - The economies of the U.S. and China are inextricably linked to the challenges of food security, global climate change, and sustainable development. Through a variety of programs, the USCEES brings together leaders from academic, government and business spheres to develop and apply innovative, solutions-oriented approaches to help move the trajectory of our nations, and the world, toward sustainable management of our natural resources and living environment. The *Technological Needs and Solutions program* is a collaboration with Purdue's GBE and focuses on 1) marketing the technological solutions developed in our member academic institutions to companies interested in addressing sustainability problems- there are currently 12 licensable technologies in the program; 2) identifying potential markets in China that may be of interest to Purdue technology and Indiana firms- there are 59 Chinese companies in our program that are looking for technological solutions; and 3) connecting Indiana companies that are interested in exploring technology collaboration, investment, joint ventures and other commercial relationships with Chinese counterparts - eight IN-based businesses are in the program. The *Visiting Scholar program* is designed to give faculty, postdoctoral researchers, and students the opportunity to undertake research from one to three months in China and up to a year in the U.S. (six scholars; one U.S. and five Chinese have participated in the program this year). The *Technical Workshop program* offered two short courses in Beijing, China in May 2012, attracting 50 students from four different Chinese academic institutions. Soil vulnerability and advanced mass spectrometry tools for environmental analysis were the focus of the courses this year.

Purdue University Cooperative Extension Service

Extension - is the community connection in every Indiana county to the expertise and resources of Purdue University and the nationwide Land Grant University system. Purdue Extension is the gateway to lifelong learning in many Indiana communities. With its tie to the Office of Engagement, Extension is able to serve as "front door" for families and their youth, communities, and businesses to the knowledge resources of Purdue University.

Extension Educators are located in all 92 counties of Indiana. These professionals provide the linkage between the residents of Indiana and the experts located on the Purdue campuses. The Educators listen to what local residents are saying and provide feedback to the University to determine research and educational needs. The Educators provide programs based on identified local needs.

Major Program Areas:

- Agriculture and Natural Resources
- Consumer and Family Sciences
- 4-H Youth Development
- Economic and Community Development