# PENN STATE SPRING 2009 OUTRREACH

## This little turtle has BIG PROBLEMS



**Robert Brooks** and the Cooperative Wetlands Center can help

BACK TO SCHOOL AFTER JOB LOSS · FARMERS UNDAUNTED BY INJURIES · NEW ONLINE OFFERINGS

### A Letter From Outreach and the College of Earth and Mineral Sciences

here is significant outreach work across almost every college at Penn State. For example, the College of Earth and Mineral Sciences has a vast amount of talented resources and commitment in its faculty and researchers, who hold expertise in socially relevant sciences that can be translated into useable knowledge for the public. Dr. Robert P. Brooks, professor of geography and ecology and director of the Penn State Cooperative Wetlands Center, is particularly gifted in translating scientific information into easily understood concepts to aid decision making.



Vice President for Outreach Dr. Craig Weidemann (left) with Dr. Bill Easterling, dean of the College of Earth and Mineral Sciences

Brooks is the recipient of this year's *Faculty Outreach* 

*Award,* which recognizes a faculty member who has made a significant impact on the community through scholarly engagement work. Brooks has taken his commitment to public education and outreach into communities throughout Pennsylvania and beyond, *assisting and engaging the public and decision makers in understanding the natural world around them.* You can read more about Brooks' activities on page 2.

Partly because of Brooks' outstanding contributions, the college can lay claim to an active outreach service to stakeholders and the public. The mission of the land-grant university is historically connected to agriculture; however, *current challenges to energy security and environmental sustainability*—the domains of Earth and Mineral Sciences—rise to the same level of importance as ensuring a safe and sufficient food supply.

Another signature project of the college is the service-learning course of Dr. Lakshman Yapa, geography professor. For 10 years Yapa's Rethinking Urban Poverty class has *challenged students to work with community members in West Philadelphia*, where there are high levels of poverty, on developing novel ways to help those in need. Yapa was the recipient of the 2008 C. Peter Magrath University Community Engagement Award—which recognizes the outreach and engagement community partnerships of four-year public universities. Go to page 6 for a story about the course from the viewpoints of former students.

To help facilitate common goals, the college links its expertise with capabilities from Outreach. For example, the Marcellus Shale discovery, uncovered by Dr. Terry Engelder, geosciences professor, has drawn a great deal of attention. If the Marcellus Shale is managed properly, it can be *a transformative resource for the economy*. The college plans to join with Cooperative Extension to establish a new joint EMS-Cooperative Extension educator position to disseminate technical knowledge about the Marcellus Shale. It's a natural partnership.

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# Out of the BOOG

How Robert Brooks and the Cooperative Wetlands Center protect water creatures, wetlands and open spaces

By Melissa W. Kaye

**One** wonders how a small, unassuming reptile such as the bog turtle can cause havoc up and down the East Coast. But this animal, which can fit in the palm of your hand, is both endangered in the Commonwealth of Pennsylvania and federally threatened. Bog turtles live in marshy wetlands with lots of springs; in Pennsylvania these wetlands are often located on the outskirts of cities in the southeast, in the Piedmont region—the very land that builders like to use for new housing developments. Builders currently need to meet a number of regulations to ensure the protection of bog turtles on these locations, and some companies have gone bankrupt waiting for approval. And, as if the habitat challenges weren't enough, their rarity and docile nature make bog turtles prized possessions on the black market.

Environmentalists and conservationists in Pennsylvania hope to have a solution to this quandary with a Habitat Conservation Plan. The project, led by Dr. Robert P. Brooks, professor of geography and ecology in the Penn State Department of Geography and director of the Penn State Cooperative Wetlands Center, aims to solve conflicts between Pennsylvania and Delaware private landowners, developers and conservationists—all who seek to manage lands and waters differently.

The project is just one example of a way that Brooks, the recipient of this year's Faculty Outreach Award, demonstrates—in the words of colleague Dr. Jim Shortle, Penn State agricultural and environmental economics Distinguished Professor—an "extraordinary ability to work constructively with people to establish and achieve common goals" of improving society and the environment.

From the bog turtle, to wetlands assessment, to educational programs, Brooks leads initiatives that aim to protect what he refers to as "sacred spaces, full of nature's wonders."

#### A Plan for Everyone

In the case of protecting the bog turtle, current regulations are done on a siteby-site basis, and they are not working, say experts. Brooks has seen the range of reactions from different stakeholders. "Some are excited and want to protect the bog turtle," he said. "Others, who may have economically driven motives, consider the turtles a nuisance. They say, 'What good are these turtles?' At that point I usually talk about the importance of protecting biodiversity and ecosystems that provide free ecosystem services to us all."

The Habitat Conservation Plan would reduce time in the land developers' application process and alleviate tension, said Brooks. Core bog turtle habitats would be made off limits—these habitats would be put in conservation banks and subject to permanent protection. In exchange for developers agreeing to purchase credits to support the conservation banks, their timetable to comply with the regulations is reduced, and they gain more certainty about plans to build in other areas that are less damaging to aquatic species and habitats.

The Cooperative Wetlands Center (CWC) and an interdisciplinary team from conservation organizations and

**Robert Brooks** is known for translating science into usable information.



Reflections: Robert Brooks takes photos in his spare time.

resource agencies developed and delivered dozens of presentations and several workshops with groups of land developers, municipal and county officials, and land conservancies about the plan.

"Our team met with a range of people, and the vast majority are in favor of it," said Brooks. The plan has recently been presented to the U.S. Fish and Wildlife Service; Brooks hopes it will receive approval sometime this year.

#### Doing the Right Thing

In 1993, Brooks created the CWC (now housed in the Department of Geography) with the aim of producing scientifically valid research and assessment tools for the conservation and restoration of wetlands, wildlife and other aquatic resources.

The effort has proven successful. "Rob's initial vision of the CWC ... has not only survived the test of time, but has also resulted in a significant legacy," said Dr. Denice Wardrop, associate director of the center and associate professor of geography and ecology. "People were attracted to the CWC because of its unique recognition of outreach as demonstrated with the bog turtle situation, the center gets this information out to the public to inform policy and planning initiatives.

Another example of this can be seen in the recently completed Atlantic Slope Consortium Project, a five-year initiative involving six institutions including the Smithsonian Environmental Research Center, the Virginia Institute of Marine Science, and East Carolina University, among others, and 40 investigators.

Project partners developed various ecological and socioeconomic indicators for assessing the condition and health of aquatic ecosystems in the Mid-Atlantic region.

As director of the project, Brooks encouraged presentations to and interviews with environmental decision makers and resource managers to explain and promote the use of these indicators to improve environmental decision making.

"Dr. Brooks [met] frequently with EPA's Office of Water and the Chesapeake Bay Program office staff to understand their research needs and

the 'right thing to do,' whether it was funded or not (it almost always isn't). Once there, that spirit and philosophy flourished in those who spent any time at all around Rob."

At the center, Brooks—who jokes that his occupation was destiny because of his last name oversees and conducts research on wetlands and streams and issues regarding their protection and management. As to interpret the science into useful information upon which they could base decisions," said Dr. Barbara Levinson, retired Environmental Protection Agency program manager for the Ecosystem Protection Program. "Dr. Brooks really has been a giant in the field of translating science into usable information for stakeholders." The Chesapeake Bay Program and federal and state agencies are considering the adoption of several of the two dozen indicators that were developed.

Currently, the CWC is working with wetland managers from neighboring states and the Virginia Institute of Marine Science to conduct the firstever regional assessment of wetland condition in the Mid-Atlantic region, visiting 400 sites through 2009. Lessons learned will help guide EPA's National Wetlands Condition Assessment, scheduled to begin in 2011.

#### Preserving Rural Character

Such technical expertise should be shared freely and often, according to



\*\* One of my personal goals that has guided my professional outreach efforts is to ensure that children everywhere have green spaces to explore near their homes."

Brooks, whose encouragement of center faculty, staff and students to serve in local government and conservation organizations is a major effort of his.

Brooks has provided leadership in his own municipality by serving for 15 years as a member on the Planning Commission in Halfmoon Township, a quiet area in Centre County dotted with farms. In this position, Brooks has pushed for the protection of natural resources and the setting aside of open spaces as much as possible.

That's not always easy, says Brooks. For example, the commission sought to pass an ordinance in the 1990s to set aside 50 percent open space on housing developments. They were met with some resistance. In response, they conducted a mail survey of residents, asking what they liked about Halfmoon. More than 80 percent of residents (there was a 50 percent return) said that most of all, they wanted to preserve the rural character of the township. That sentiment has guided the commission's work ever since, and it was reconfirmed in a similar survey conducted 10 years later.

That, combined with holding open houses and meetings, helps to win people over. "An informed public is more willing to adopt a new ordinance," said Brooks, who also serves on advisory committees of the Pennsylvania Department of Environmental Protection, the U.S. EPA and the Millbrook Marsh Nature Center in State College, among several others. Millbrook Marsh has emerged as a

#### FOR MORE INFORMATION

For details on projects under way at the Penn State Cooperative Wetlands Center, go to http://www.wetlands.psu.edu/ online.

premier educational center focusing on wetlands and watersheds in central Pennsylvania (see box).

### From Salamanders to Science

When asked what is most gratifying about his work, Brooks recalls his childhood. Brooks grew up in central Baltimore County, Md., in a town called Cockeysville. He was able to walk from his house to streams and wetlands, where he could search for salamanders and crayfish.

"One of my personal goals that has guided my professional outreach efforts is to ensure that children everywhere have green spaces to explore near their homes," said Brooks. "I never dreamed such fun could become an occupation."



## **FIELD OF STREAMS**

#### Millbrook Marsh is a quiet and

valuable natural area of wetlands and streams tucked in between busy Park and College Avenues in State College. In the early 1990s, some local conservationists approached Penn State about combining the 50-acre private holding of Millbrook with an adjoining 12-acre farm owned by the University along Puddintown Road. So became the Millbrook Marsh Nature Center, leased and managed by Centre Region Parks and Recreation through an advisory committee, since 1997.

In partnership with local and state nongovernmental organizations, Dr. Robert P. Brooks, director of the Cooperative Wetlands Center, led a team—including Penn State faculty Ken Tamminga, landscape architecture; Dr. Robert Carline, retired from forest resources; and Dr. Rick Day, crop and soil sciences—that developed a protection plan for the marsh.

Brooks continues to serve on the nature center's advisory committee today, running an active research program, and providing guidance on protecting and managing the site. The center aims to teach the public the value and function of wetlands, with everything from nature hikes, to specialty camps, to kids' birthday parties, to fairs, to moonlit walks.

A capital campaign to raise funds for a new four-season education building at Millbrook has been under way, with groundbreaking expected this summer. Go to http:// www.crpr.org/Millbrook/MMNC-Menu.html for more information.

## Snapshots from WEST PHILADELPHIA

Students help empower a community to fight poverty —through everyday life details

By Melissa W. Kaye

#### *"Almost everything I know about poverty I learned in*

West Philadelphia," says Dr. Lakshman Yapa, Penn State geography professor.

For a decade Yapa—in partnership with community organizations and residents in the Parkside neighborhood of Philadelphia, where there are high levels of poverty has offered Rethinking Urban Poverty: The Philadelphia Field Project, a course in which students are challenged to work with community members in West Philadelphia to rethink existing resources to solve problems.

"Our students may not have the power to attract factories and create jobs or eradicate racism, but they discover their nonsovereign power in engagement using their academic skill, organizational ability and sense of duty," said Yapa. For the project, he received the National Association of State Universities and Land-Grant Colleges' 2008 C. Peter Magrath University Community Engagement Award, which recognizes the outreach and engagement community partnerships of four-year public universities.

The community and students have imple-



Lucky Yapa—first row, second from right—with a group of students during the inaugural year of the project, 1998

mented more than 65 academic and practical projects. Here are some examples:

#### Nutrition Improvement

—Emily Farr ('01)

**Currently:** Humanitarian livelihoods specialist, Oxfam America

What I did for the Philadelphia Project: There are few grocery stores in West Philadelphia, and most of them tended toward overpriced corner markets focusing on convenience foods. I [researched] what alternative sources existed for residents to have access to healthy, reasonably priced foods as well as to nutrition education. The theory is that by changing the way people think about food, by finding cheaper and more accessible sources for healthy food, and improving nutrition to avoid expensive health-related problems, we can mitigate poverty.

How I felt about the project: I felt very positive about my involvement; there are not many opportunities for undergraduates to do a lot of fieldwork.

### How the project impacted my career choice: After

graduation I spent two years in AmeriCorps—which included giving cooking and nutrition classes in low-income communities. I then got an M.S. in food policy and applied nutrition, with a focus on nutrition interventions and humanitarian assistance. My B.S. degree was in geography (not related to nutrition), so my involvement directly impacted my decision to focus on issues of food and livelihood.

#### Social Spaces

—Corinne Thatcher ('04)

Currently: Instructor, Chief Dull Knife College, and director of development, American Indian Housing Initiative (AIHI), Lame Deer, Mont. [The AIHI is a collaborative community development effort led by Dr. David Riley, architectural engineering, Penn State.] What I did for the Philadelphia **Project:** I volunteered at the Lancaster Avenue Business Association, headed by Sister Aisamah Muhammad—a spunky Muslim woman who works tirelessly to improve the physical and social spaces of the Mantua and Belmont neighborhoods of West Philadelphia. I also worked at a community garden.

**How I felt about the project:** I didn't feel as if I was in a position to tell the people I met in the city what to do to improve their lives, because I quickly realized that any answers I could provide would be inadequate and/or naive; rather, I learned to offer my skills and



Corinne Thatcher, center, with her mother and Sister Aisamah Muhammad, the head of the Lancaster Avenue Business Association

assistance in support of West Philadelphians' own ideas and initiatives.

How the project impacted my career choice: Working with and learning from people who live in a place that most students only study had a strong impact on the way I view economics, education, politics and even service. I feel very similarly about my role in the Northern Cheyenne community as I did in West Philadelphia: I am highly interested in the process of economic development, but I am not interested in being an economic development agent for the tribe—I'm here to support their dreams, not to impose mine.

#### **Credit Cooperative**

—Edward Smith ('06)

**Currently:** First-year master's student in College Student Affairs, and Multicultural Internship Program coordinator, Penn State

#### What I did for the Philadelphia

**Project:** I conducted research in attempts to build a Community Development Credit Cooperative operating on the principles of microlending. This cooperative would enable small businesses and eligible community members to apply for and receive loans to be used for facility upkeep, housing renovation and security improvements. I also participated in a facilitation program for young people in jail awaiting sentencing, placement, legal advice or trial.

**How I felt about the project:** Although I was only a firstyear student at the time, in retrospect it was an incredible experience.

How the project impacted my career choice: After graduation I was an analyst for RBC Capital Markets in New York. Nevertheless, the idea of working with Dr. Yapa and the Philadelphia Field Project

again influenced my decision to return to Penn State for my graduate work.

#### **Rescue Services**

--Vanessa Massaro ('07) **Currently:** Commuter student programming assistant and master's student in geography, University of Arizona

#### What I did for the Philadelphia

**Project:** Using GIS [Geographic Information Systems], I compared the distribution of fire engines to occurrence of fires in the city. Since the need for fire rescue services is closely related to poverty (areas where poorer people live tend to have higher rates of fire occurrence), adjusting methods of fire service distribution in consideration of need is part of a comprehensive approach to poverty alleviation.

**How I felt about the project:** The project was one of the first times I realized the kind of impact I could have in a community, despite not having a great deal of power or capital.

How the project impacted my career choice: The desire to continue this type of community engagement and university outreach is what prompted me to pursue a career in academia.

# Fighting Cancer in Appalachia

Pennsylvania and New York are beleaguered by persistent poverty; residents in this area, known as northern Appalachia, are considered by the National Institutes of Health to be medically underserved. This reduced access to health care has led to increased rates of cancer incidence and death.

Enter the Northern Appalachia Cancer Network (NACN)—a communityacademic partnership that aims to reduce the cancer burden in Appalachian Pennsylvania and New York. Established in 1992, the NACN is one of the longest running and most successful networks of community cancer coalitions in the country. It is the recipient of the 2009 Penn State Scholarship of Engagement Award.

Twelve community cancer coalitions—representing 17 different counties with a population of 1 million people—and numerous local rural health care providers and clinics join in a partnership with the Penn State Colleges of Medicine and Agricultural Sciences and the Milton S. Hershey Medical Center to develop and deliver best practices for cancer reduction to their communities.

"There are more than 100 active members of these coalitions; they understand their communities," explained Dr. Eugene Lengerich, professor in the Department of Public Health Sciences at the Penn State College of Medicine and leader of the NACN. "They know where people congregate, what interests people, how to motivate people, where need may be greatest. They are passionate to reduce cancer risk in their neighborhood."

Rural communities link with academia to reduce their risk of a killer disease



Gene Lengerich leads an initiative that helps residents in medically underserved areas.

The NACN has many success stories. For example, the partnership has increased mammography screening, developed methods to enhance survivorship from colorectal cancer, vaccinated girls and women against the human papillomavirus (the cause of 70 percent of all cervical cancer) and helped users of smokeless tobacco to quit.

The Penn State Scholarship of En-

gagement Award recognizes a project that best exemplifies an "engaged institution" as defined by a Kellogg Commission report on the future of state and land-grant universities: an institution that has redesigned teaching, research, and extension and service functions to become even more sympathetically and productively involved with its communities. ■

#### RECOGNITIONS

As the recipient of the Penn State Scholarship of Engagement Award, the Northern Appalachia Cancer Network will now become Penn State's nominee for the Northeast region's W.K. Kellogg Foundation/C. Peter Magrath University Community Engagement Award, sponsored by the National Association of State Universities and Land-Grant Colleges. Regional recipients of this award go on to compete for the national C. Peter Magrath award. Penn State and Dr. Lakshman Yapa, geography professor, received both the regional and national C. Peter Magrath awards in 2008 for the Philadelphia Field Project, a course in which students are challenged to work with community members in West Philadelphia to rethink existing resources to solve problems (see page 6).





After losing their jobs, these three adult learners embark on new professions with Penn State on their résumés

By Deborah A. Benedetti

The average length of time a worker stays with the same employer is about four years, according to the Bureau of Labor Statistics. That, combined with the millions of individuals who have been laid off in the down economy, translates into a highly competitive job market.

"With unemployment climbing, workers have to try to stay one step ahead of what's needed to stand out on the job," said Elizabeth Lasher, Penn State Continuing Education career counselor. "It's important to conducts the "Do What You Love; Love What You Do" and "Managing Your Career: Putting a Plan in Place" workshops for adult learners.

Currently, there are more than 20,000 adult learners at Penn State defined by the University as those who are 24 years old and up who have returned to school after a few years, are active duty and veterans of the military, or are managing multiple roles. Here are stories of three Pennsylvanians who, after losing their jobs, turned to Penn State to prepare for new careers. technology technician. Then the plant closed in 2003, leaving about 1,000 people out of work.

Even before that, Hardin saw the writing on the wall. "TV technology was changing, going to more polymers and flat screens," he said. Hardin had started taking Penn State courses while working, with the goal of earning an associate degree to help him advance in his job. When the plant closed, he redoubled his efforts, earning a bachelor's degree in management information systems in 2007.

"WITH UNEMPLOYMENT CLIMBING, WORKERS HAVE TO TRY TO STAY ONE STEP AHEAD OF WHAT'S NEEDED TO STAND OUT ON THE JOB."

look at your skill sets and determine what skills are transferrable and what other skills are needed in your current job or for a new career." While such decisions depend on the individual, going back to school is a way to head in a new direction, added Lasher, who

#### From Plant Production Worker to IT Manager

After 20 years at the Corning Asahi Video Products Co. plant in State College, Pa., Keith Hardin advanced from an hourly TV panel production worker to a salaried information While at Penn State, the father of three children served as president of the Adult Learners at Penn State student organization.

Hardin now manages the Information Technologies Group of the Susquehanna Economic Development



Keith Hardin loves his new job as an IT manager.

Association – Council of Governments in Lewisburg, Pa., a regional agency serving 11 counties.

A big believer in returning to school, Hardin has spoken to the Penn State Board of Trustees about his experience switching careers. "I'm ecstatic," Hardin said of his job overseeing the agency's computing and networking needs and working with local government agencies. "It's all thanks to my Penn State education."

#### From Newspaper Reporter to Teacher

Elaine Siddons' family, work and community relationships have always revolved around children. A wife and mother of three daughters, she



Elaine Siddons always dreamed of being a teacher.

newspaper in Lewistown, Pa., Siddons wrote about education.

After working at The Sentinel for 25 years, a newsroom shakeup left Siddons jobless. "It was the best thing that could have happened," said Siddons, who always wanted to be a teacher. She had already looked into applying to Penn State. "I just hit the 'submit' button," she said.

Returning to college after many years in the workforce was "a little scary, but we made it work," Siddons said, who credits her success to the support of her husband Bradley, a Penn State alumnus, and daughters.

Siddons, who earned a B.S. in elementary and kindergarten education, was chosen as student marshal



Carol "Buffy" Holt's new career will focus on solving electronic crimes.

it! I am so thankful to Penn State," she said. "Now I'm counting on these second-graders to teach me everything else I need to know to be the best teacher I can be."

#### From Assembly Line to Cyber Forensics

When Murata Electronics North America Inc. was closing its State College plant, Carol "Buffy" Holt of Julian, Pa., volunteered for a layoff so she could prepare for a new career. The single mother chose a Penn State degree program, because she could attend classes in the evening and participate in the federal work-study program during the day—allowing her to earn money to cover a portion

#### A NEWSROOM SHAKEUP LEFT SIDDONS JOBLESS. "IT WAS THE BEST THING THAT COULD HAVE HAPPENED."

teaches Sunday school, directs a children's choir, helps coordinate a preschool program and serves as a storyteller for a community ministry. And at work, with The Sentinel daily for commencement and also received the College of Education's Outstanding Student Teacher Award.

She now teaches second grade at Lewistown Elementary School. "I love of her educational expenses.

After eight years of assembly line work on electronic circuit boards, Holt needed some new skills, so she participated in Continuing Educa-

## Graduate! Philadelphia

A college degree can increase a person's lifetime earnings by \$1.2 million over a high school diploma, but some students who start college don't finish. That's true for nearly 300,000 adults in the Greater Philadelphia region. A new organization—Graduate! Philadelphia—is committed to helping these adults complete their degrees, and Penn State is assisting.

Penn State is providing academic counseling services at the organization's Center City facility, participating in college fairs and helping with other projects. "Through Penn State Abington, Penn State Brandywine and World Campus, Penn State can bring a wide range of academic degree programs and other educational resources to adults in this region," said Penn State Abington Chancellor Dr. Karen Wiley Sandler.

tion programs on writing research papers and basic math. "I didn't think I could do it," said Holt, but after successfully completing an associate degree in letters, arts and sciences, she was ready for more. Holt enrolled in the B.S. degree program in security and risk analysis, focusing on cyber forensics—extracting information from computer storage media and guaranteeing its accuracy.

Graduates applaud a commencement speaker at Penn State Abington.

An internship with Reclamere Inc., an information technology asset management business in Tyrone, Pa., gave Holt the chance to work on theft of intellectual property cases and manage a data destruction and recycling project for a company replacing computer equipment.

"Having Penn State on my résumé is important, because it can help open doors to the new career I want—solving cyber and electronic crimes," said Holt, a spring '09 graduate. ■



#### MENTORS FOR ADULT LEARNERS

Adult learners at Penn State now have access to a new mentoring program, thanks to a partnership between Penn State Continuing Education and the Osher Lifelong Learning Institute (OLLI) at Penn State. OLLI is an organization that provides social and learning enrichment for mature adults.

For OLLI mentor Dr. Glenn Carter, former director of Admissions and Records at West Virginia University, the mentoring program is a chance to share his experiences attending graduate school in his 40s with someone in a similar situation. "We openly talk about everything—our families, schoolwork and how our lives intersect," Carter said.

Charles Mensch, who lost his job after 36 years with Bolton Metal Products Co. when the plant closed, wasn't ready for retirement, so he enrolled in an associate degree program in information sciences and technology. "Just sitting and talking with someone who understands what I'm going through is helpful," Mensch said.

For more information, call mentoring program coordinator Elizabeth Lasher at **814-865-3443**.

# Staying on the Farm

The AgrAbility Project helps farmers continue their labor of love despite injuries or health conditions

By Matt Swayne

or Jerry Deal, farming is more than a job; it's a way of life. It's in his blood—a lineage going back more than 200 years when his relatives were the recipients of a land grant to begin farming the rich, rolling land of Somerset County. Deal, his brother, Paul, and nephew, Myron, raise 65 heifers and milk more than 110 cows. Deal wasn't about to let severe arthritis in both knees affect his heritage and ability to work and manage the farming operation.

He learned about the AgrAbility Project from his daughter-inlaw, and he was soon connected with the program in Pennsylvania. The program—which helps farmers with long-term injuries or health conditions remain on the job—is a national effort of

FARM FATALITIES In 2007, there were 29 fatal farm-related incidents in Pennsylvania. Adults aged 60 and over were the victims of most fatal farm accidents. the U.S. Department of Agriculture. In Pennsylvania, the program is run by Penn State's Departments of Agricultural and Extension Education and Agricultural and Biological Engineering, Extension, the Pennsylvania Office of Rural Health, Easter Seals Central Pennsylvania, and Pennsylvania Assistive Technology Foundation.

"Initially I didn't even know AgrAbility existed," said Deal. "So, once we got connected, I was very happy to start work with them."

The AgrAbility assessment team suggested Deal use after-



market tractor steps, instead of ladders, on tractors to ease the entry and exit of the vehicles. The team also suggested modifying forage harvesters and wagons with speed hitches that would prevent the need to repeatedly get on and off the tractor. A utility vehicle was recommended to help Deal travel around the three farms that make up his farmstead. And to help finance the equipment modifications, they helped him navigate through the services available through the Pennsylvania Office of Vocational Rehabilitation (OVR).

Deal said his partnership with AgrAbility has assisted him with continuing his participation with the family farming operation. "I have nothing but high praise for AgrAbility," he added.

#### **Conquering a Hazardous Work Environment**

Farmers face one of the most hazardous work environments in the state, said Dr. Connie Baggett, associate professor of agricultural and extension education and project director of AgrAbility for Pennsylvanians. The constant interaction agricultural workers have with machinery increases the risk of serious injury and even death.

Nationally, in 2007, 715 deaths and 80,000 disabling injuries were attributed to agriculture.



Baggett said keeping farmers like Deal on the job benefits all Pennsylvanians. Agriculture is one of the state's leading industries. "Ag production in Pennsylvania is one of the things the governor is proud of," said Baggett. "And the more people we can keep on the job, the better our production will be."

Linda Fetzer, coordinator for the program, said that not all the hazards of farming come from working around dangerous equipment; the arduous, repetitive tasks can cause significant wear and tear on the back, knees, and other joints and muscles.

"One misconception is that you have to be involved in a farm accident to qualify for AgrAbility," said Fetzer. "Actually, we work with a lot of farmers who are suffering from the effects of arthritis and repetitious injuries." The program helps provide on-site assessments of farm operations and offers recommendations on equipment modifications that can help these farmers return to work.

#### Stories From the Field

Like Deal, David Walrath, who has farmed his family's northern Bradford County operation for nearly 60 years, suffered from joint and muscle pain—with debilitating hip, shoulder and arthritis problems for more than 20 years. AgrAbility professionals helped him connect with resources to make equip-



AgrAbility recommended a utility vehicle for David Walrath, who suffers from hip and joint problems.

ment changes to improve his ability to function on the farm. For example, a utility vehicle paid for by OVR provided muchneeded mobility assistance. "It's doubtful that I would be able to continue to work without the equipment and changes that have been made," Walrath said.

Tim and Colby Lehman, ages 19 and 21 respectively, both had a lifelong dream to farm. Due to a genetic bone disorder, both men reached their full heights that are no taller than the average 8 year old. After their parents purchased a 119-acre dairy farm, AgrAbility and OVR worked with the family to help identify a special automatic glide for the brothers to move around the milking parlor with greater ease; they also recommended power-operated steps, automatic take-offs for the milkers and a handrail to access the milking area. Funding from OVR helped make the suggestions a reality on the farm. "[These modifications made] a huge difference for the boys," said their mother, Tina Lehman.

Perhaps Dr. Angela Hissong, who as a field team member for AgrAbility works with the farmers, puts it best. Hissong, an instructor in occupational therapy at Penn State Mont Alto, lives on a farm herself and says that being a part of the AgrAbility team fulfills her passion for agriculture, rural communities and farming as a way of life.

"It is an overwhelming blessing to be part of a team that assists farmers with disabilities to get back to what they love—working with their families, the animals and the land," said Hissong. Go to **http://agexted.cas.psu.edu/ agrab/** for more information.



## Inside the Mind of the Outdoors Expert

Pennsylvania Department of Conservation and Natural Resources Secretary Michael DiBerardinis discusses nature tourism, natural gas drilling and the challenges of urban sprawl

hen Michael DiBerardinis was named Secretary of the Department of Conservation and Natural Resources (DCNR) in 2003, he embarked on a year of travel and dialogue with more than 2,000 DCNR staff and stakeholders. The result was a new action plan for the agency responsible for 117 state parks and 2.1 million acres of state forest land. He recently talked with Penn State Outreach magazine about DCNR's expanded mission, as well as the University's activities to protect natural resources.

#### What is your primary mission as DCNR secretary?

A: Historically, DCNR was seen as the steward of public lands, but we have expanded that mission to be stewards and advocates for all the natural resources of Pennsylvania. We are focusing on people, communities and economies. We asked people what they value, and that helped us create a set of new goals to frame our work. One example: We have embarked on a statewide tree planting project in metropolitan areas. Penn State Cooperative Extension is a prime partner.

**You have been a Philadel**phia neighborhood activist, recreation commissioner and vice president at the William Penn Foundation. How did these roles prepare you for your current position?

As a neighborhood activist, I had a deep belief in the extension of our democracy into people's everyday lives, engaging citizens in the civic life of their cities and neighborhoods. As recreation commissioner, I learned people want to connect in an active way with nature, so we built hundreds of outdoor and environmental education programs. At the William Penn Foundation, I ran the grants program and learned that grant-funded programs need to be connected with other groups, agencies, and institutional and governmental players to build endurable economies and communities.

## What is one of DCNR's biggest challenges?

A: We're consuming land at a clip far exceeding population growth. This may be the result of Pennsylvania's role as an industrial leader. When the core of our major cities experienced big hits as the industrial economy declined, we became particularly susceptible to sprawl and urban development. • How is DCNR responding? • We have protected more Iand—140,000 acres—in the Iast five years than in the previous 35 years. We've added to park land and forest land, and we're helping counties, nonprofits and local governments that want to build trails and protect important rivers, streams and other natural resources to do that.

Nature tourism is growing, with the first nature inn under development at Bald Eagle State Park, as part of the Pennsylvania Wilds initiative. Why are people more interested in this type of recreation?

A: There is an immense demand for in-park, modern overnight accommodations. Many people are interested in the opportunity to watch wildlife, take a hike or a paddle and enjoy some interpretive programming, but they prefer not to sleep on the ground. We wanted to create more ecologically sensitive and less impactful accommodations and model conservation as we build nature inns that meet LEED [Leadership in Energy and Environmental Design] silver or gold certification.

#### • The agency recently conducted a lease sale for gas development on DCNR land. How will natural gas drilling impact state forest lands?

A: We took four years to develop a natural gas lease agreement that protects the land so there is little or no impact on the ecosystem. Our preference is deep drilling, which is what is necessary to reach the Marcellus Shale formation. It requires less of an impact on the forest because the wells are spaced farther apart. We worked with legislators and the oil and gas industry to be able to safely lease land. Our forest management practices are certified as sustainable by an independent international organization. **Q**. The Governor has proposed using \$174 million in income from the Marcellus Shale natural gas drilling leases to help close the budget deficit. How is this affecting DCNR?

A: We will operate our agency on a significant portion of these fund dollars. Every dollar in the oil and gas fund we spend is a dollar contributed to the general fund. This use of the fund will help DCNR and the Commonwealth to weather some of the most challenging economic times in decades and preserve DCNR's ability to manage state parks and forests, promote land conservation and sustainable communities, and provide outdoor connections for citizens and visitors.

**Q**. Penn State is helping to educate landowners about the Marcellus Shale formation and natural gas leases (see box). What do you think about these efforts?

A: The University is providing an invaluable service by educating and protecting our natural resources one the state isn't capable of doing. Penn State is making a direct connection to landowners, educating them on the options and potential impact of their decisions.

Do you bave any advice for Penn State?

As a member of the University's Board of Trustees, I've developed a deep understanding and respect for Penn State's impact in the Commonwealth. My only advice is: Keep up the good work.

#### RESOURCES

Penn State Cooperative Extension is helping Pennsylvania landowners understand their natural gas leasing rights: Workshops and a live call-in television program with Penn State Public Broadcasting have reached more than 20,000 Pennsylvanians. For more information, go to http://naturalgas. extension.psu.edu.

## WORLD CAMPUS Student fund

#### WHEN ECONOMIC CLOUDS DARKEN,

the cost of education becomes harder to justify for adult students, even though continuing their education may be crucial for new employment opportunities. To help meet those financial challenges, Penn State World Campus staff created a fund that provides aid for students in financial need.

The fund provided \$10,000 to six students—all who maintain a GPA of 3.0 or higher—for help with spring and summer semester tuition.

#### **Recipients include:**

- a single mother of five children, one with special needs, who is in enrolled in the Bachelor of Science in Organizational Leadership program
- a Bachelor of Arts in Law and Society student who had put her dreams of a college degree and law school on hold 17 years ago when her son was born
- a Turfgrass Science participant who cares for his disabled father
- a former military police officer who hopes to attend law school and practice military law
- a police officer in Los Angeles working on a Mental Evaluation Unit of a SWAT team
- a stay-at-home mom, in the Organizational Leadership program, with three small daughters

For a story featuring three adult learners who went back to school to change careers, go to page 9.

#### **RECOGNITION FROM CARNEGIE FOUNDATION PENN STATE HAS RECEIVED THE COMMUNITY ENGAGEMENT CLAS**and commitments to community with a public and nationally recognized classification. It ex-

**SIFICATION** from the distinguished Carnegie Foundation for the Advancement of Teaching. According to the Carnegie Foundation, "The elective Community Engagement classification provides a way for institutions to describe their identity and commitments to community with a public and nationally recognized classification. It extends and refines the classification of colleges and universities." Vice President for Outreach Dr. Craig D. Weidemann said, "We are delighted that the Carnegie Foundation has recognized the breadth and depth of Penn State's many outreach and engagement efforts."





## SCIENCE AND TECH CAREERS

**BY 2016, MORE THAN 65,000 JOBS** in a wide range of fields in Pennsylvania will require a background in science education, according to an analysis by the Pennsylvania Science, Technology, Engineering and Math (STEM) Initiative, one of six U.S. public-private partnerships aimed at increasing students in STEM careers and retaining, recruiting and retraining the current workforce.

Penn State is helping to meet this education challenge by working with the Pennsylvania STEM Initiative and providing grants for STEM projects through Outreach's Thematic Initiative Fund (TIF) in education. In Febru-

ary, Penn State faculty members and Pennsylvania school districts and intermediate units were invited to submit proposals for the first round of funding.

Penn State's goals for TIFfunded projects are to enhance STEM education in grades five to 12, encourage interest in these careers, and identify and facilitate access to STEMrelated resources.

According to Dr. Kyle Peck, associate dean for outreach, technology and international programs in the College of Education, "Combining Penn State's academic resources with "Combining Penn State's academic resources with those of other partners will have a broader impact on solving this critical societal issue."

-Kyle Peck

An avatar visits the Hintz Family Alumni Center.



## V I R T U A L PENN STATE

UNIVERSITY PARK BOASTS 90 PERCENT RETENTION RATES—what's the campus'

RETENTION RATES—what's the campus' secret? Shannon Ritter, former Penn State undergraduate admissions counselor who is now social networks adviser for Penn State World Campus, explained: "University Park provides activities to get involved and make friends, making students feel at home."

In the online environment of World Campus, students can feel disconnected without the same goings-on. So, Ritter asks, "What can World Campus do online to replace that sense of community?"

The solution: World Campus launched its own island in Second life, created by Ritter, incorporating several of the favorite gathering places of Penn State students, including the Creamery and the Diner. And, in a stunning representation of the Hintz Family Alumni Center, World Campus students can also participate in virtual academic advising sessions. Advisers have set office hours, just like on campus. Virtual tailgates and other community building events such as graduation receptions, concerts, scavenger hunts and end-of-semester celebrations round out the Penn State experience.

To view the island, go to "PSU World Campus" in Second Life. (Visit **http://www. secondlife.com** to create a free account and download the free software.) those of other partners will have a broader impact on solving this critical societal issue."

Outreach magazine will highlight results of Penn State's STEM activities in future issues. In this issue, see the Science & Technology section (page 31) for information about new initiatives from the Eberly College of Science.

#### Penn State's

## INAUGURAL LAUREATE

#### Notes From Music Professor Kim Cook

#### WHEN THE ANCIENT GREEKS

recognized individuals for significant achievement, they crowned them with laurel wreaths, proclaiming them "laureates." Centuries later, Penn State is the first higher education institution to officially designate a university laureate—a public representative charged with increasing the visibility of arts and humanities programs at Penn State. Kim Cook, professor of music in cello, was the inaugural laureate for the 2008–2009 academic year.

"The concept for the Penn State laureate sprung from the idea that we have an abundance of talent in the arts and humanities, and universities should have a responsibility to promote a greater appreciation of such endeavors," said Penn State President Graham Spanier.

As laureate, Cook has been reaching out through musical performance and by speaking to groups who otherwise would not have had an opportunity to learn about classical music. Her many activities have included being featured at the new student convocation last fall, leading the Penn State Cello Choir during the President's Open House and at the President's Club Reception (where Spanier accompanied the choir on washboard), appearing on WPSU Radio's "Take Note" and performing for students and communities across the state and internationally.

Cook said the creation of this position shows how much President Spanier and the administration value the arts and humanities. "President Spanier has a vision to make the arts more accessible to members of the Penn State community and the community at large," she said.

Cook herself has a track record in this area: Through intensive recruiting efforts, Cook and colleague Jim Lyon have helped to build Penn State's string major program from only a handful of students in 1991 to more than 70 in 2008. In addition, Cook created the cello choir and one of the most important cello studios in the Northeast, attracting talented cellists from more than 18 different countries.

### HAVE A QUESTION About Music?

Ask University Laureate Kim Cook at **kdc3@psu.edu**. As part of "Did You Know? Musical Notes from the Penn State Laureate" on Penn State Live, Cook will answer musical questions that you've always wanted to ask.



Kim Cook directs the Penn State Cello Choir during President Graham Spanier's Open House.



ROLL OVER, BEETHOVEN. Elvis is on the course syllabus.

"I believe that popular music is a significant American art, and it receives far less attention than it deserves," said William J. Kelly, head of the Department of Integrative Arts and lead faculty for the department's new online popular music initiative.

The initiative allows tech-savvy participants to explore the development and impact of major popular music genres such as blues, jazz, mainstream pop, and rock and roll with the help of Web-based technology. The courses have had a high level of interest, says Kelly, and are offered through Penn State World Campus and to resident Penn State students through eLearn-ing@Penn State Cooperative.

As general education electives, these courses do not require students to have a background in music. Rather, the courses consider how social, economic and cultural factors shaped popular musical expression in the United States. The department plans to expand online offerings in the popular music series with courses on punk; rock and roll in the 1960s, 1970s and 1980s; and the business of music.

Enhancing this initiative are courses designed by the School



Music students can feel the beat online with high-level technology.

of Music. For example, "Evolution of Jazz," taught by Assistant Professor Steve Hopkins, has been offered through World Campus for several years and is now part of the popular music series. Hopkins' new resident spring course on film music (at University Park) will soon be available through World Campus.

Course designers are paying special attention to how these classes can take advantage of emerging Web 2.0 technology. "As high-level media become more advanced, we're actively exploring opportunities to make these courses more engaging, more community-driven and more student-customizable," said Dr. Keith Bailey, director of the e-Learning Institute in the College of Arts and Architecture.





Soldiers who took part in an online College of Arts and Architecture photography course offered through Penn State World Campus gave the class a world view beyond Penn State, said instructor Alice Teeple. "There were some beautiful and haunting images they shot, which brought unique insights," she said. This photograph of a Light Attack Vehicle was taken just west of Rawah, Iraq, by Marine Sgt. Diego Guerra.

—Melissa W. Kaye

## a CHOIR focused on DIVERSITY

"A CHORUS REACHES DEEP into community life, crosses all sorts of social and economic lines and makes a contribution not only to a city's aesthetics, but also its humanity."

These words of famed conductor Robert Shaw serve as an inspiration for D. Jason Bishop, director of Choral Activities at Penn State Erie, The Behrend College. They've played a large part in leading him to establish the new Young People's Chorus (YPC) of Erie—a youth choir with a mission to build community and opportunity through arts-based choral outreach.



A music initiative brings children together.

religious differences and socioeconomic status," said Bishop. "It is our hope to bring children together from the widest variety of backgrounds possible, to teach them through music to work with each other and to respect each other's differences."

Bishop has visited almost every Erie public school to talk about YPC Erie and audition interested children, ages 7 to 18. The response has been outstanding: By the end of 2008, the program had already exceeded its goal of enrolling 100 children. Funds are available for families unable to pay tuition for

YPC Erie emulates its sister program, the YPC of New York City, in that it seeks to remove the obstacles that typically prevent children from participating in such opportunities.

"Those obstacles can take the form of racial boundaries,

the after-school program.

Public and private performances of the newly formed choir, including appearances at festivals and street fairs, are expected to start this spring.

## CASTING CALL

**THE NEXT GENERATION** of professional actors may get a start this summer when the new Penn State Summer Theatre Project raises its curtain June 1 through June 21.

After holding auditions in New York City and at University Park in April, directors of the program, offered by the College of Arts and Architecture, School of Theatre and Outreach's Conferences unit, will select 25 young performers, ages 17 to 23, to experience the immersive training methods employed by Penn State's musical theatre program. Students will take classes in acting, musical theatre performance, auditioning, scene study, voice, jazz, tap and musical theatre styles taught by Penn State faculty—professionals with years of onand off-Broadway experience.

"The techniques we teach are based in the requirements of contemporary musical theatre performance, so each exercise is rooted in the skills it takes to be on a professional musical theatre stage right now," said Susan Russell, co-director of the program with Raymond Sage, both assistant professors in the Schools of Theatre and Music, respectively.

The students will audition for and appear in public readings of three plays and two musicals by new writers, through a relationship with the University's two nationally recognized new-works festivals, the Penn State New Musical Festival and Cultural Conversations. The latter is the only university play festival devoted to issues of local and global diversity. The festivals take place in February and March.

"No other program features such a unique



Participants will audition for Cultural Conversations—the only university play festival devoted to issues of diversity.

collaboration of training, exposure to new works and performance," said Russell.

To learn more, visit http://www.outreach. psu.edu/programs/summer-theatre-project.

## Sexual Violence PREVENTION



**PROFESSIONALS** who would like to receive advanced training and development opportunities in sexual violence prevention and intervention can attend the National Sexual Assault Conference, offered by the Pennsylvania Coalition Against Rape and the National Sexual Violence Resource Center in conjunction with Penn State Outreach's Conferences unit and the College of the Liberal Arts. To be held in Alexandria, Va., on Sept. 9–11, it is the first time that Penn State is helping the groups organize their biannual conference, the only one of its kind.

"Our primary goal is to provide highquality and high-impact skill building opportunities," said Sally Laskey, associate director of the National Sexual Violence Resource Center, about the event. For more information, go to http://www.outreach.psu.edu/ programs/sexual-assault online.

## CHESTER COUNTY'S HIDDEN POOR

#### GABY PEREZ, BORN IN MEXICO, lives

in Chester County—in an immigrant, at-risk neighborhood hidden by the McMansions that provide a wealthy face to the area. In the ninth grade at Avon Grove High School in West Grove,

she participates in Teens Networking Together—a local multicultural group. In the program she does things like work with children and perform with The Aguilas, a Mexican folkloric dance group, all of which she says "keep me from getting into trouble."

Perez's activities are a part of 4-H Creating Community Networks, established in 2005 by Penn State Extension in Chester County. It provides free after-school and community programs to children and teens—with networks of service providers for educational and leadership programs that "help people to make choices that will affect life decisions," said Laurie Szoke, extension educator in Chester County.

"We have a growing Mexican migrant population that serves the agriculture industries in Chester County—where gangs are a choice, where teen pregnancy and school dropouts are a reality, and where third-world living conditions are a significant factor."

Programs last one to three hours per week and often take place in trailer parks, apartment complexes, schools and community centers. "The goal of this program has been to reach outside the norms of Cooperative Extension to communities that can be considered hidden and forgotten," said Katie Poppiti, Chester County native and senior in Penn State's College of Agricultural Sciences. As an intern in the program last summer, Poppiti helped to engage youth and families in programs that aim to foster self-respect, responsibility and teamwork and focus on topics



Gaby Perez (right) at a Latino festival

ranging from health and nutrition to decision making.

"The kids really looked forward to the once-a-week time spent with 4-H," Poppiti said. "This program was at the heart of what I believe to be community development."

The program has been catching on: Teens Networking Together, for example, started with only four students from two schools; it now has more than 40 members from four school districts.

"It helps people who don't know that a lot of communities are suffering," added Gaby Perez about 4-H Creating Community Networks.

## exchange with TRINIDAD

THE CARIBBEAN ISLANDS of Trinidad and Tobago pride themselves as having diverse backgrounds and cultures. As someone who grew up there, Dr. Nicole Webster, associate professor of agriculture and extension education at Penn State, finds herself deeply connected to the islands' history, culture and values. And as someone who has worked as a scholar with Trinidad and Tobago officials, she is concerned about youth in the nation; the development and engagement of young people has been a pressing issue over the last decade. Now, in her new program, Webster finds that she may have a major impact in not only her home nation, but also here as well.

This spring, a half dozen Penn State

Cooperative Extension educators are traveling to Trinidad and Tobago to collaborate with 4-H educators in a knowledge exchange program

"to learn more about youth development and 4-H in the context of a multicultural society," said Webster.

In the weeklong trip, endorsed by various ministries there, the Pennsylvania educators will help train Trinidadian Extension educators in implementing various 4-H curricula and resources with youth audiences. At the same time, the educators will learn



Nicole Webster (center, leaning on van) works with youth in Trinidad.

about the culture and life in Trinidad and how Extension—most importantly 4-H—plays a role in the development of young people across the islands.

"We live in a global world where actions here impact others," Webster said. "The Pennsylvania Extension educators' involvement in this program expands minds and lives both in the U.S. and in the Caribbean."

## POSITIVE IMPACT on CHILD SUPPORT ENFORCEMENT

A PENN STATE TRAINING program for child support enforcement workers has been shown to positively impact their job performance.

Data comparing counties with equivalent populations show that those counties sending more child support enforcement workers to the training conducted by the Pennsylvania Child Support Enforcement Training Institute (PACSETI) report a greater increase in establishing paternity, collecting money owed for child support and obtaining child support over counties sending fewer people to training, explained Dr. Jennifer Mastrofski, PACSETI director of evaluation and faculty member of the Penn State Justice and Safety Institute (JASI). JASI, an Outreach unit academically affiliated with the College of the Liberal Arts, operates PACSETI in partnership with the Pennsylvania Department of Public Welfare Bureau of Child Support Enforcement.

"One of the reasons we are a highperforming county is participation in these trainings," said Ann Marie Oldani, director of the Centre County Domestic Relations Section, who, with her staff, is responsible for collecting child support.

Oldani described her office's goals: "To ensure we're up on the law and operating consistently and correctly." She said that a recent training on new guidelines for clients receiving public welfare—those who move from one county to another—has enabled her staff to expedite getting money to these families.

Since 2002, more than 3,000 county and state workers have participated in New Hire Training and other advanced-level programs, representing more than 10,000 enrollments.

Tom Sheaffer, director of the Public Welfare Bureau's Division of Program Development and Evaluation, noted, PACSETI "significantly enhances the effectiveness of Pennsylvania's Child Support Enforcement Program and outcomes for children."

—Deborah A. Benedetti

# SUSQUEHANNA RIVER VALLEY UPTURN

Penn State's landscape architecture program focuses on downtown revitalization

**A NEW GEISINGER MEDICAL FACILITY** brings traffic to downtown Danville, Pa., but the central business district remains plagued with aging buildings, struggling businesses and a lack of recreational options.

Danville has turned to the planning and design expertise in Penn State's landscape architecture program for help in its revitalization efforts, becoming the third Susquehanna River Valley community—following Selinsgrove and Sunbury—to do so. "We enlisted Penn State's help to not only conserve our quality of life but also to develop a community vision to enhance it through a planned balancing of economic, recreational and aesthetic factors," said Jim Wilson, executive director of the Danville Business Alliance.

As urban sprawl from Philadelphia, Wilkes-Barre and Lehigh Valley creeps into the Susquehanna River Valley, more towns are employing revitalization strategies to conserve their small town character. Selinsgrove, Sunbury and Danville received funding from the National Trust for Historic Preservation's



Students go to a community meeting in Danville, where the business district is struggling.

Main Street Program and other sources to aid their downtown economic development efforts.

#### **Residents' Input Guides Process**

While urban sprawl is not a direct threat to Danville, awareness of the problem led the town to seek Penn State's assistance. Assistant Professor Caru Bowns and her fourth- and fifth-year landscape architecture students are working with Danville residents in a community-wide effort to revitalize the downtown. Students collected input from community members through public workshops and surveys during the fall and completed the master plan in December. Like the projects in Selinsgrove and Sunbury, "community input guides the students' planning as they come up with ways to revive Danville's civic spaces and also address commercial and recreational opportunities," said Bowns.

Both Selinsgrove and Sunbury are implementing their master plan recommendations. Sunbury, for example, has issued an RFP (request for proposal) for the final design of shops and restaurants in Stroh Alley, previously an unsafe and neglected area in the central business district. "When projects move forward, it gives credence to the viability of the university and community collaboration," said Bowns.

—Amy Milgrub Marshall

#### THE ECONOMY & WORKFORCE

# D I V E R S I T Y T R A I N I N G

**TEACHERS ARE PERHAPS MOST APT** to see changing demographics in Pennsylvania communities—through the different faces and languages in their classrooms. Joseph Roy, assistant superintendent for the Springfield Township School District in Montgomery County, finds that now it's more important than ever for teachers to work on understanding the different cultural backgrounds of their students. "Our district has been very proactive to insure that we embrace diversity and focus on equity," said Roy.

In a new partnership, the district has been working with Dr. Carla Chamberlin-Quinlisk, associate professor of communication arts and sciences at Penn State Abington and coordinator of the campus' Center for Intercultural Leadership and Communication, on a new professional development workshop for the district's teachers that aims to break cultural barriers.

The Teachers as Intercultural Leaders program, offered through Continuing Education, looks at cultural identity and how stereotypes and prejudices are formed and maintained focusing on how individuals see the world and why they see it that way, said Quinlisk. With three full days of training in the fall, followed by five two-hour sessions over the winter and spring, "the participants learn over time," explained Quinlisk.



Changing demographics in classrooms call for intercultural education.

"The program is focused on building effective relationships. You don't just unlearn your prejudices and stereotypes in one afternoon; this really is a developmental process."

The workshops take participants through an interactive and reflective route of learning about communication, language and culture in school settings, allowing teachers to share their experiences.

One exercise required participants to meet with their students' parents to learn about their cultural backgrounds. "Our teachers ... need to understand not only that where they come from impacts how they see others—but that they also need to communicate to make sure they understand where students and parents are coming from," said Roy, adding that he hopes to extend the program to more teachers in the future.

—Kristen Smith

### What's New Online: MASTER OF PROFESSIONAL STUDIES—HUMAN RESOURCES AND EMPLOYMENT RELATIONS

#### **EVEN WITHOUT THE POOR ECONOMY**

and massive layoffs, the field of human resources and employment relations has become increasingly complex. "Compensation and benefit programs, salaries, employment and labor laws—the field is rapidly evolving," said Dr. Paul Clark, professor and head of the Department of Labor Studies and Employment Relations in the College of the Liberal Arts. That's why the department and Penn State World Campus are offering the new online degree, Master of Professional Studies in Human Resources and Employment Relations.

"This program meets a need for professionals in the field who want to improve their expertise and further their career but who do not have access to a residential master's program or can't participate in one because of their schedule," said Clark. The program has exceeded enrollment expectations: There were 90 students enrolled in the fall, with approximately 50 additional students this spring.

"The program has been so useful and applicable that I can't wait to get to the next assignment," said Daniel Geltrude, program participant and owner of the accounting firm Geltrude & Company, LLC, based in Nutley, N.J.

—Melissa W. Kaye

# HOW TO STAY AWAY from **DRUGS**

### Teens offer tried and true strategies in a nationwide curriculum

**THIRTEEN-YEAR-OLD DYLAN** recounts his refusal of drugs: "I was at this boy's house seeing a friend ... and this guy pulled out some dope. He asked all of us if we wanted to, and we said no." Maya, age 12, is able to resist marijuana with an explanation to the boy that offered it to her: "One of my past friends used to sell it himself. He got arrested and ... we had to take care of his child." Jaqueline prefers to avoid situations altogether where there are drugs, finding other things to do. And Raul simply leaves the setting.

These are examples of narratives from a drug resistance skills training curriculum called "keepin' it REAL" (refuse, explain, avoid, leave), created by a team of Penn State and Arizona State researchers led by Distinguished Professor Dr. Michael Hecht and Dr. Michelle Miller-Day, associate professor, both of communication arts and sciences at Penn State.

Listed on the federal government's National Registry of Evidence-based Programs and Practices, "keepin' it REAL" teaches youth about risks and consequences, effective decision making and communication skills, including the REAL strategies. First introduced in 1998 to Phoenix, Ariz., seventhgraders, it is being implemented by various school districts nationwide; now D.A.R.E. America (the national police officer-led drug abuse resistance education program) just licensed it to be its new seventh-grade curriculum. Starting this fall, D.A.R.E. officers will teach it to more than 125,000 students per year across the United States and then around the world.

"When that many young people are using our materials, it's a heavy responsibility," remarked Hecht.

#### Personal Narratives Can Help Others

To develop the program, the team collected stories from thousands of youth and transformed the narratives into the multimedia, multicultural prevention program—with the tag line "from kids, to kids, through kids."

#### FOR MORE INFORMATION

Michael Hecht (researcher): mhecht@psu.edu Michelle Miller-Day (researcher): mam32@psu.edu Magi Colby (project coordinator): magi@psu.edu Project Web site: http://www.kir.psu.edu/index.html According to teachers using the program, this approach is effective. "It allows [students] to pull from their own experiences and individual strengths," said Stephanie Clayton of the Amarillo, Texas, Independent School District.



The approach: refuse, explain, avoid, leave

While the curriculum was originally written for Phoenix youth, it can be adapted for other students. The team is currently studying more about what teachers do when they adapt it to their classes; they are also developing a rural version of "keepin" it REAL" that will be introduced this fall in Pennsylvania and Ohio schools. A new curriculum for grades 6–12 demonstrates how a simple question advanced a cause

# The Original GIRL POWER



**IN A 1969 PRESIDENTIAL** news conference, Washington correspondent Vera Glaser asked a newly elected President Richard Nixon why he had made so few appointments of women to top-level positions, adding: "Can we expect some more equitable recognition of women's abilities, or are we going to remain the lost sex?"

Nixon was taken aback, but he responded that he would change this. He went ahead and appointed a Task Force on Women's Rights and Responsibilities (composed of a progressive group of women, including Glaser), which came to the conclusion that yes, there should be more women in these jobs, and the president had the power to appoint them. The president then created a White House staff position to recruit talented women for high-level jobs.

The Penn State project "A Few Good Women: Advancing the Cause for Women in the U.S. Government" documents this time in history with a collection of audio segments, biographies and images that is available to view online and in an exhibit at University Park's Pattee Library until April 17. And in the fall, the Education and Behavioral Sciences Library in Paterno Library and the Pennsylvania Center for the Book (housed at Penn State) are launching a new online curriculum for grades 6–12 based on the collection—so students nationwide can understand for themselves how Glaser and others have cleared the career path for them.

"Young women have no real idea about some of the obstacles we faced in the '60s and '70s and what we did to overcome those obstacles," said Barbara Hackman Franklin, a Penn State alumna ('62) and the White House staffer responsible for recruiting women to

#### **ON THE WEB**

Hear stories from the women pictured above, plus others, at: http://afgw.libraries.psu.edu/background.html.

#### Pathbreakers: These women overcame career obstacles in the '60s and '70s.

work in government positions.

Franklin worked with the Special Collections Library and the Education and Behavioral Sciences Library on the women's oral history project and the curriculum. Franklin added, "Back then there was a different set of societal expectations. Women who overcame that opened a lot of doors. I hope that our teaching aids will make that time in history come alive."

The flexible curriculum—which will provide teachers with lessons and activities, from Web quests to Readers Theatre—can be used in bits and pieces or as a whole. "For students to interact

> with these profiles from the past is amazing," said Karla Schmit, Education and Behavioral Sciences librarian and assistant director of the Pennsylvania Center for the Book.

# **PITTSBURGH** CONNECTION

**URBAN TREE FORGE** is a creative studio based in Pittsburgh that specializes in the use of locally available and sustainably acquired natural resources, particularly wood, to create value-added productssuch as unique cabinetry and doors.

"We use fresh wood from Pittsburgh's urban forest and recycled wood from various sources within our community to make furniture, sculptures and other artistic products," said John Metzler, the company's owner. Recently Metzler approached The Penn State Center: Engaging Pittsburgh for help in developing a kiln drying system—necessary to convert wood into other products.

The new center, an effort of the College of Agricultural Sciences and Outreach's Cooperative Extension unit and led by Deno De Ciantis, aims to connect businesses like Metzler's and other organizations to Penn State programs that can help them. While Penn State outreach activities in the Pittsburgh area have already been long established, the center aims to elevate the profile of Penn State in the area by bringing under one roof as many Penn State programs—virtual or physical—as possible. These programs focus on providing solutions for not only sustainability efforts, including alternative fuel exploration, but also for challenges ranging from corporate research and devel-

Deno De Ciantis (right) at a community garden outside of Pittsburgh

opment to workforce and community development.

According to De Ciantis, by improving Penn State's outreach services in the Pittsburgh area, the University can "enhance its recognition as a local resource and as a part of the fabric of that community. Pittsburgh has a metropolitan area population of about 2.5 million people. Our center complements local institutions in the Pittsburgh area helping to provide solutions to many issues facing the region."

For more information, contact De Ciantis at 412-263-1000 or dwd5@psu.edu.

## NEW LIFE FOR THE ODGE NEON

ERIC BYRNE, SUPERVISOR of the mechanical laboratories at Penn State Berks, is working with a group of Penn State students and eCycle Inc., a company that specializes in electric motor technology, to convert a 1995 Dodge Neon into a hybrid car that achieves 80 miles per gallon. "This project is teaching students the concepts behind building a hybrid vehicle, and along the way they are helping to preserve our environment through ingenuity," said Byrne, who expects the project to be completed by the end of the spring semester.



Students brainstorm for parts in an effort to make a hybrid out of an old vehicle.

## DOUBLE DOSE Penn State addresses parents' concerns about immunizations—and tracks the sources of their

fear at the same time

**NOT SO LONG AGO**, parents had their children immunized without much thought about the possibility of serious side effects. Today an ever-increasing number of parents choose to skip these immunizations, fearing that some of them could cause severe abnormalities.

"There are many reasons why parents reject getting their kids vaccinations, including political or religious reasons," said Dr. Benjamin H. Levi, M.D., Ph.D., associate professor of humanities and pediatrics at the Penn State Milton S. Hershey Medical Center. "Ninety-nine percent of what I see is fear."

To help doctors better inform parents, Levi and his colleagues organized the Penn State Immunization Project. A key component of the project is an educational tutorial titled "Addressing Parents' Concerns about Childhood Immunizations"—a CD-ROM that so far has been sent free of charge to more than 200 sites throughout the country, including city, county and state health departments.

"Health care providers are the target audience," Levi said. In addition to discussing the origins of parents' concerns, the tutorial presents clinical implications of this debate, the ethical and professional obligations that clinicians have toward parents and how these clinicians can respectfully address parents' concerns.

Recent reports in popular media about certain im-

munizations possibly contributing to the upswing in diagnoses of autism and other disorders have fueled those concerns. "Doctors should not get defensive; they should try to understand why parents feel as they do," said Levi, adding that some doctors are even removing families from their practices if the parents refuse to have their children routinely vaccinated.

The tutorial, funded by the Robert Wood Johnson Foundation, has been well received. Levi said that after seeing the tutorial, "participants not only viewed parents' resistance as more understandable, given what the parents had been exposed to, but also were more likely to believe that we are not professionally justified in refusing to care for children whose parents oppose routine childhood immunizations."

An educational tutorial has been sent free of charge around the country.

Levi feels that developing and nurturing a strong relationship with parents can establish trust, and that without trust, there is little that doctors and other medical personnel can do to help children and their parents. He explained, "It is the job of parents to worry, and it is our job to help them figure out what to worry about."

#### **HOW CLAIMS ARE PERPETUATED**

In addition to an educational tutorial for health care providers, the Penn State Immunization Project is creating a database tracking allegations raised against routine childhood immunizations and tracing them back to their original source data—the goal being to understand how allegations are perpetuated throughout society. For more information, go to http:// www.hmc.psu.edu/humanities/ faculty/levi.htm.



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# RECIPE FOR NUTRITIOUS EATING



A majority of camp participants say they've learned new skills.

#### FOR MORE INFORMATION

To learn more about "Cook Like a Chef!" and other camps created by Anne Quinn Corr, instructor of nutrition in Penn State's College of Health and Human Development, go to: http://www.outreach. psu.edu/programs/cooking-camp or call 814-863-5100.

### Cooking camps aim to encourage kids to make the right food choices

**"I HAD FUN PREPARING FOODS** that I never tried before." "I attended the camp so I can help make lunch or dinner." "I learned how to chop an onion without it falling apart."

No small feats for these kids ages 11 to 13, who participated in Penn State's summer "Cook Like a Chef!" camp. Campers learn about the nutritional benefits of fruits and vegetables, practice basic cooking techniques, custom-design their own recipes and take part in fun physical activities.

"People today are detached from real food," said Anne Quinn Corr, Penn State instructor of nutrition in the College of Health and Human Development (HHD) and creator of the program, which is offered through Penn State Outreach's Conferences unit. "For those of us with limited financial resources, too often food comes from a box or a bag and is already processed in very unhealthful ways. ... Teaching people how to feed themselves simply with real food demystifies the cooking process and makes good health attainable."

Last summer Pennsylvania Nutrition Education Tracks (Tracks) provided scholarships for 12 youth who normally would not have had the opportunity to participate in the camp. Tracks, housed in the Penn State Department of Nutritional Sciences, manages the education component of the Pennsylvania Department of Public Welfare's Supplemental Nutrition Assistance Program, which is for families of limited income.

Dr. Barbara Lohse—associate professor of nutrition education and community nutrition in HHD and principal investigator for Tracks in Centre County—had connected Corr with eligible families. "Many of these kids have no variety of food at home," said Lohse. "By attending this camp ... they may be much more apt to try new foods."

#### New Skills Learned

According to Corr's research since she started cooking camps nearly eight years ago, a majority of participants say they have learned a new skill or improved a skill—such as keeping hands and work surfaces clean and using knives safely.

With childhood obesity a major problem in the United States, Corr sees a critical need for more nutrition education for young people. "I'm very happy to empower youth to make the right food choices and fight the siren call of fast food."

# GLOBAL INITIATIVES

How Penn State can be a positive force all over the map

#### OF PENN STATE'S 92,000 STUDENTS,

about 2,500 study abroad each year. That number "could be better," said Dr. Michael Adewumi, vice provost for International Programs. "We would like our students to become global citizens; when they go out into the workforce they should be able to work with everyone."

Adewumi, who is responsible for overseeing the international engagements of the University, is a firm believer in the slogan "think globally, act locally." Studying abroad is a way to instill this philosophy in students, he explained. "Employers want more out of graduates; they need them to be globally competent." To achieve this, his office is working with deans, chancellors and faculty across the University to integrate more international experiences into the curricula.

This initiative is part of Adewumi's vision for Penn State to play a bigger global role. "We have enormous intellectual resources," he said. "Penn State is already a national powerhouse. It can also be a positive force globally."

### Intellectual Resources for Change

The idea is not a new one for Adewumi. Before being appointed vice provost, Adewumi, who is from Nigeria and also a professor of petroleum and natural gas engineering, served as director of the Alliance for Earth Sciences, Engineering and Development in Africa (AESEDA). AESEDA is a partnership between scholars at U.S. and African universities, governments of African nations, and aid organizations to rebuild Africa's depleted human and natural resources. "The idea is to change things for the better using intellectual



Michael Adewumi wants to expand Penn State's teaching, research and outreach worldwide.

resources," said Adewumi. "Penn State can help engineer growth in Africa, just as it does in the Commonwealth."

Now, Adewumi is looking to expand Penn State's leadership around the globe through teaching, research and outreach.

For example, in one program, Penn State Outreach's World Campus worked with the Smeal College of Business to offer a tailored curriculum in supply chain management to Saudi Arabia-based Aramco employees. "This type of program can be expanded: Students can go to Saudi Arabia, and faculty can partner with and travel to other existing institutions," said Adewumi.

Another example of international

collaboration is a partnership between several universities and the Nigerian government to build a Center of Excellence in Mining in Nigeria. This initiative involves faculty members in the College of Earth and Mineral Sciences. It is run through AESEDA and led by Dr. Thaddeus Ityokumbul.

These are opportunities that make Adewumi eager to get out of bed and go to work in the morning. "If you look back at when Penn State was founded, nobody would have imagined that it would become this world-class institution," he said. "Being a part of it is just so exciting."

For more information, go to **http://** www.international.psu.edu.

## On a Mission: IMPROVING TEACHERS' SKILLS

**BARBARA HOUTZ,** a former science teacher, has big plans. As the new director of outreach in the Eberly College of Science and author of the book "Teaching Science Today" (Shell Education, 2008), she hopes to apply her extensive experience as a science educator to expand the role of outreach in the college.

"I have traveled the country providing professional development programs to science teachers and have experienced firsthand the dire need to improve teachers' skills," said Houtz, adding that her eventual goal is to extend a wide range of educational programs



Houtz has worked with educators nationwide.

to learners around the country. Some upcoming programs include:

- Science U: This summer science camp series from June 21 through July 31 for K–12 students will offer such topics as "Busted! Myth Meets Science."
- Summer Experience in the Eberly College of Science: This program from late June through July enables select students from the Upward Bound Math

and Science program (which brings to campus minority high school students from the poorest schools in the state) to participate in an authentic research project.

- Family Science Nights: Interactive displays are designed to help parents encourage their children to achieve in math and science in school and to choose a career in a science field. There were two events last fall, and one is planned for the spring, all held in local schools.
- Science and Math Teacher Professional Development Workshops: An upcoming weeklong course (June



For Science – U summer camp information go to http://www.sciencecamps.psu.edu.

21–27) will bring high school teachers up to speed on the latest techniques used by forensic scientists. A two-day course on the subject will be held for law enforcement professionals and judges during that week.

• Partnership with the National Institutes of Health (NIH) DNA Day: A new partnership with NIH promotes National DNA Day (April 25), when Penn State scientists interact with students and teachers across the nation through live Web-based broadcasts and online chats.

For more information, contact Barbara Houtz at **beh179@psu.edu** or **814-865-4158.** 

### What's New Online: MASTER'S DEGREE IN SYSTEMS ENGINEERING

#### A NEW ONLINE MASTER'S DEGREE

in systems engineering is being offered through Penn State World Campus. According to lead faculty Dr. James Nemes, professor of mechanical engineering at Penn State Great Valley, systems engineering has been important in the aerospace and defense industries for some time, but more recently it is gaining interest among engineers in the automotive, pharmaceutical and telecommunications sectors. "We're especially targeting working professionals who want to advance in their careers," he said. For more information, go to http://www.worldcampus. psu.edu/MasterInSystemsEngineering.shtml.

# TROOP Support

From inclusive recreation, to help for families, to affordable education, these new Penn State programs are aimed at the military

**FOR SIX YEARS,** Joshua Watson served as an Army military police officer in Afghanistan and Iraq. Now a Penn State student, he still can't help scanning rooftops and people wherever he goes. "I'm always on guard," said the Montoursville, Pa., resident.

Between combat deployments, Watson, 27, organized recreation activities, such as trips to the beach, for sol-

diers. He enjoyed the work and decided to major in recreation, park and tourism management at Penn State, where he also participates in inclusive recreation programming on campus, to help him readjust to civilian life. While inclusive recreation refers to modifying physical activities for wounded soldiers (and others), it also will address psychological and cognitive conditions resulting from war, such as post-traumatic stress disorder and brain injury.

During Penn State's Inclusive Recreation for Wounded Warriors program in January, Watson talked to participants about how inclusive recreation has helped him. Funded by the Department of Defense through 2011, the program aims to provide knowledge and resources for military recreation managers to integrate active-duty wounded soldiers into existing recreation programs on military installations, said Ruth Ann Jackson, executive director, Penn State Hospitality Leadership Institute, and program co-principal investigator.

The Penn State program was created by certified therapeutic



Joshua Watson readjusted to civilian life at Penn State.

recreation specialists in Penn State's Department of Recreation, Park and Tourism Management in the College of Health and Human Development (HHD) in collaboration with HHD's School of Hospitality Management and Outreach's Management Development Programs and Services.

#### From Wounded Soldiers to Military Kids

In another program, Penn State is helping to reach out to the children of deployed military service members.

Susan Smith's husband was deployed to Iraq a year ago. "My kids felt isolated, alone and different from other kids," she said. Enter Operation: Military Kids (OMK). OMK is a U.S. Army effort with communities nationwide to support children impacted by deployment, through partnerships with national and local organizations.

When Smith's children attended an OMK event in Pennsylvania, they were very excited. "My son said, 'Mom, there are kids here that are just like me!'" recalls Smith, who coordi-

#### By Deborah A. Benedetti and Melissa W. Kaye



nates OMK in Pennsylvania through Penn State Cooperative Extension's 4-H organization.

OMK activities include providing youth with Hero Packs, to recognize the sacrifices that kids are making. The ageappropriate packs contain everything from crayons to digital cameras. Speak Out for Military Kids is for ninth–12th graders (both military and nonmilitary) interested in raising public awareness about the challenges that children face when their parents are deployed. Ready, Set, Go! Trainings are for educators and community group representatives to help them better understand the issues of military families. Plus, OMK sends to communities Mobile Technology Labs, equipped with laptops, so that children can send e-mails to their parents.

And in honor of the Month of the Military Child (April), an event to educate youth about Middle East culture will take place in May at the Carnegie Science Center in Pittsburgh. Youth camps are planned for the summer.

#### Affordable Education

Another new initiative reflects a trend in higher education nationwide. Beginning last fall, all members of the U.S. armed forces serving on active duty and studying at the undergraduate level became eligible for Military Grant-in-Aid from Penn State World Campus—which was recently selected by the publication Military Advanced Education as a top military-friendly university. The grant is an effort to make the University's online education offerings more affordable for these military professionals.

Since 9/11, an increasing number of higher education institutions have been offering reduced tuition rates to service



members. According to Ginny Newman, assistant director of military education at Penn State, "In the fall semester, the grant assisted 78 service members around the world in pursuing a Penn State education."

#### FOR MORE INFORMATION

Inclusive Recreation— Tammy Buckley, 814-867-1756, tbuckley@psu.edu

Operation: Military Kids— Susan Smith, 814-865-2264, sjs52@psu.edu

http://www.operationmilitarykids.org/ public/home.aspx

Military Education— Ginny Newman, 814-865-6016, gan1@psu.edu

http://www.worldcampus.psu.edu/ StudentServices\_Military.shtml

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## OUT OF SIGHT, OUT OF MIND U.S. WATER SYSTEMS

New documentary explores what is really underground and what it means for your health and community.

Liquid Assets tells the story of essential water infrastructure systems: drinking water, wastewater, and stormwater. These aging systems have not been maintained and require immediate national and local attention. Exploring the history, engineering challenges, and political and economic realities in ten cities and towns across America, Liquid Assets provides an understanding of the hidden assets that support our way of life.

View the trailer at liquidassets.psu.edu. Purchase the DVD at Penn State Media Sales, 1-800-770-2111, mediasales.psu.edu.

Produced by Penn State Public Broadcasting WPSU

MEDIA: DVD PRICE: \$24.95 LENGTH: 90 MINUTES

THE STORY OF OUR WATER INFRASTRUCTURE

Liquid Assets