The Wilma H. Schiermeier Olentangy River Wetland Research Park devotes itself to water and to making water cleaner.

Shimmering in sunshine next to the Olentangy River, just north of Ohio State University’s Columbus campus off Dodridge Street, the 52-acre swamp complex supports research by the College of Food, Agricultural, and Environmental Sciences on wetlands and their benefits to water quality. “Research at the park provides insight into the services that wetlands provide while raising the visibility of wetlands and their contributions to people’s well-being,” said Kurt Keljo, the Franklin Soil and Water Conservation District’s watershed coordinator, who has partnered on projects at the wetland with CFAES scientists. Experts often call wetlands “nature’s kidneys” for how they collect, filter and purify water, whether drainage from farm fields, runoff from city streets, flooding from rivers or otherwise. The research park, Keljo said, “provides an opportunity to explore how we can use wetlands to address some of the most pressing water pollution problems of our day,” including nutrient runoff, the Gulf of Mexico’s dead zone and Lake Erie’s harmful algal blooms.

Current projects are studying, for example, how land cover and land use affect food webs and contaminants in water, specifically as the water moves from rural to urban areas; how rivers respond when dams are removed—in this case, the Olentangy River’s 5th Avenue dam, torn down in 2012; and how to better restore Lake Erie’s coastal wetlands, which help protect the lake’s water.

The college’s School of Environment and Natural Resources manages and administers the park. Support comes in part from the Ohio Agricultural Research and Development Center.

The Ramsar Convention on Wetlands in 2008 named the park a Wetland of International Importance, citing its research achievements, welcoming of the public, and special plant and animal life. Only 19 U.S. wetlands carry that recognition.

Learn more: go.osu.edu/olentangywetland

photo courtesy of Thomas A. Boden
BREAKING THE COLOR BARRIER: SCIENTIST DEVELOPS NEW METHOD THAT COULD BOOST USE OF NATURAL FOOD DYES

Anthocyanins are compounds that give color to most red, orange, purple and blue fruits and vegetables, as well as cereal grains and flowers. They are powerful antioxidants, believed to play an important role in the prevention of cancer and other diseases. But until recently, anthocyanins have been difficult and expensive to isolate into pure forms. That caused headaches for Monica Giusti, associate professor of food science and technology and a scientist with the Ohio Agricultural Research and Development Center, whose work focuses on using pigments from fruits and vegetables as natural alternatives to synthetic food dyes. To spare her laboratory budget the expense of purchasing purified anthocyanins for research purposes, Giusti developed a new technique to extract the pigments, achieving highly purified anthocyanin blends. For her efforts, Giusti was recognized as Ohio State University’s 2013 Early Career Innovator of the Year. The technique, which received a patent in November, is cost-effective and creates new opportunities for expanded research of anthocyanins, Giusti said. Ohio State is partnering with Anthocyantific, LLC, a new venture created to commercialize the product; Giusti is chief scientist for the start-up company. Food processors face plenty of challenges in attempting to switch from artificial to natural food colorants, Giusti said. “The pigments interact with the food,” she said. “They will change depending on the acidity of the food, the sourness of the food, and composition of the food overall—for example if there are proteins, fats, or other ingredients in that food.” Giusti’s work focuses on investigating the best natural pigments to use with different foods as well as the health benefits of anthocyanins. Giusti, who has been with Ohio State since 2004, credits her students for their work in the lab and the research they’ve done. “Students are the key. They all helped to build up to the place we are now,” she said.

Learn more: go.osu.edu/colorcodes

GENE DISCOVERY SHEDS LIGHT ON SIZE, RIPENING PROCESS OF FRUITS AND VEGGIES

What makes a tomato big or small at the genetic level? Why does it matter? Esther van der Knaap, an Ohio Agricultural Research and Development Center geneticist, led an international research team that discovered and cloned a gene that regulates fruit size in tomato. This is only the second domestication gene involved in fruit size ever cloned in any vegetable or fruit crop.

“This work represents an important improvement in the understanding of the regulation of fruit size and how domestication played a role in the selection of this gene,” van der Knaap said. Ohio State postdoctoral researcher Manohar Chakrabarti and PhD student Na Zhang also collaborated in the study, which was published in the Sept. 30, 2013, issue of the Proceedings of the National Academy of Sciences.

The cloned gene, known as $SlKLUH$, impacts fruit size by increasing cell layers and delaying ripening. According to van der Knaap, this gene promotes extra cell divisions during the process of fruit development, immediately after fertilization. These extra cell divisions lead to enlarged fruit, while the delay in ripening is likely the result of an extension of the cell division stage.

FERAL CATS AVOID URBAN COYOTES, ARE SURPRISINGLY HEALTHY

Cats that live outdoors in the city do their darnedest to steer clear of urban coyotes, says a new study by a researcher in the College of Food, Agricultural, and Environmental Sciences.

Learn more: go.osu.edu/colorcodes
The SIKLUH gene originated thousands of years ago as early farmers in South America began domesticating wild tomato plants that had very small, round fruit. “Our findings suggest that the allele giving rise to large fruit arose in the early domesticates of tomato and became progressively more abundant upon further selections,” van der Knaap said.

In 2008, van der Knaap reported the discovery of a gene that controls fruit shape in the journal *Science*.

This basic research has important implications for vegetable and fruit production: It could allow breeders to manipulate genes to create new varieties with desired size and shape characteristics, as well as with different maturity dates to suit specific growing environments and conditions. **MAURICIO ESPINOZA**

**REWITING OHIO’S PHOSPHORUS RISK INDEX TO KEEP NUTRIENTS AND WATER ON FIELDS**

Fifth-generation corn, soybean, wheat and hog farmer Terry McClure knows the importance of water quality and uses best management practices on his 3,800-acre farm to lessen the potential for agricultural runoff into Ohio waterways.

So much so that he’s opened his Paulding County farm to Ohio State University researcher Elizabeth Dayton who is in the midst of a three-year project to revise an agriculture tool to better predict phosphorus runoff, offer farmers more reduction options and improve Ohio water quality.

The On-Field Ohio project seeks to revise the U.S. Department of Agriculture-Natural Resources Conservation Service Ohio Phosphorus Risk Index to be more precise in predicting the risk of phosphorus moving off farm fields, she said. Phosphorus is the agricultural pollutant often implicated in the degradation of Ohio fresh surface water and a major contributor to harmful algal blooms, experts say.

Dayton’s goal is to make the P-Index, used by farmers and applied in all nutrient management plans, more accurate by increasing management options to reduce phosphorus runoff; and to create a Web-based tool so farmers can easily calculate and manage their phosphorus runoff, she said. This is significant considering that the P Index is an integral part of nutrient management plans for both manure and commercial fertilizer application.

Some management practices being evaluated include: tillage, soil type, fertilizer placement, soil phosphorus content, field topography, soil infiltration rate, drainage control structures and cover crops. To date, monitoring equipment has been installed on 28 farm fields in the Scioto, Grand Lake St. Marys and Western Lake Erie Basin watersheds; the latter are the two most problematic watersheds in heavy agricultural areas, she said.

Surface and subsurface runoff water; soil; site and farmer management information data collection is underway. The team has collected some 5,000 water samples to be analyzed, Dayton said. **TRACY TURNER**

**COYOTE, CAT CUISINE: WHO’S ON THE MENU?**

Coyotes are known to prey on free-roaming cats, whether ferals, strays or pets. Free-roaming cats, on the whole, have been shown to kill great numbers of birds and small rodents.

Both cats and coyotes can annoy city dwellers by howling at night, digging through trash and threatening pets.

Both animals can pose a public health risk: Cats can spread toxoplasmosis; on rare occasions, coyotes have bitten people.

Learn more: go.osu.edu/YPn
“There really is not another program like this anywhere in the nation,” said Greg Yost, a 4-H educator who has devoted his skills full time to Youth Outdoors since early 2000, shortly after the venture began. He co-leads the program with a manager from Cleveland Metroparks.

Youth Outdoors provides year-round outdoor experiences to urban youth ages 8 to 18 who live in the city of Cleveland and participate in the Adventure Clubs through recreation centers, neighborhood youth centers, churches and other youth-serving organizations. The kids participate in monthly outings that include hiking, biking, camping, backpacking, fishing, rock climbing, canoeing, kayaking, snowshoeing, cross-country skiing, nature exploration, teambuilding and service projects. In addition, participants can apply to join special horseback riding clubs.

“Youth Outdoors have become volunteers in the program and several have worked as seasonal employees for Cleveland Metroparks. It’s really made a difference.”

Today, some of the initial participants of Youth Outdoors have become volunteers in the program.

In 2013, Youth Outdoors provided leadership for approximately 400 programs to youth and adults, including monthly outings with 28 Adventure Clubs.

Youth Outdoors is gaining attention: It has received calls from several park districts nationwide with questions on how to replicate the program, Yost said.

MARThA FilIpIC

“Together, we’re able to work with youth differently than if this was just a 4-H program or just a Cleveland Metroparks program,” Yost said. “Cleveland Metroparks’ strength has been to connect people to nature and adventure recreation programming. The partnership with Ohio 4-H has added a positive youth development component. Youth participate in ongoing Adventure Clubs that provide opportunities to grow their appreciation for being outdoors in nature in every season, as well as develop the teamwork, citizenship and life skills that 4-H is known for.”

Every year, nearly 5,000 children and teens in Cleveland get their feet wet—and muddy—in learning an appreciation of nature thanks to Youth Outdoors, a unique collaboration between Ohio State University Extension 4-H Youth Development, the City of Cleveland Division of Recreation, and Cleveland Metroparks.
Invasive water species, if not stopped, can hurt boating, ruin fishing, wipe out native species, and cost people and Ohio’s economy money.

OSU EXTENSION CELEBRATES 100 YEARS, LOOKS TO EVEN BRIGHTER FUTURE

In 1914, the U.S. Congress passed the Smith-Lever Act, which codified into federal law and provided funding for the outreach efforts taking place at land-grant universities across the nation. Thus, the Cooperative Extension Service was officially born.

One hundred years later, Extension has become the world’s largest non-formal educational system, stimulating innovative research and vital educational programs for youth and adults through progressive information-delivery systems. These efforts have improved lives in both rural and urban America, in turn helping to shape a nation. "This is a once-in-a-lifetime kind of year for Extension," OSU Extension Director Keith Smith said. "The Smith-Lever Act has proven to be a visionary piece of legislation that has changed the lives of many Ohioans and Americans for the better."

OSU Extension will take advantage of this momentous occasion to highlight the many ways in which it contributes to the state’s well-being and development, said Ken Martin, OSU Extension department chair.

It will also promote the strategies being implemented for enhancing outreach in the future—including the flexibility of Extension to adapt programming and anticipate the needs of Ohioans, new approaches to sharing information efficiently and effectively, and the incorporation of new audiences and alternative funding sources.

"The Extension system of cooperative funding and cooperative effort has truly become a model for the rest of the world," Smith said. "And we owe much of our success to the forethought of Senator Smith and Representative Lever."

MAURICIO ESPINOZA

Learn more: go.osu.edu/OSUEcentennial and extension100years.net

“The Extension system of cooperative funding and cooperative effort has truly become a model for the rest of the world.”

—KEITH SMITH
INVESTMENTS NOURISH FOOD INDUSTRIES CENTER

A handful of new partnership agreements attests to an influx of private investment in The Ohio State University’s Food Industries Center.

“Industry these days cannot go it alone,” said Debra Gibson, administrator for the Mid-America Food Processors Association, a partner in one of those agreements. “We must have the science behind new developments, a student base of new leaders, and a platform where timely information can be disseminated.”

That’s one reason why in March, for the first time, MAFPA held its annual meeting on campus.

MAFPA originated as the Ohio Canners Association and the Indiana Canners Association and initially had strong ties to both Ohio State and Purdue University. “We are looking to regain that scientific relationship for our members,” Gibson said. In addition, the center can introduce the association to other food processors that aren’t currently MAFPA members, said center director Valente Alvarez.

“We have always had a good relationship, but this year we are really enhancing our collaboration,” Alvarez said.

IN ADDITION, THE CENTER HAS RECENTLY SIGNED AGREEMENTS WITH:

• Quality Chekd Dairies Inc., a national dairy organization that provides members with on-site, online and regional training workshops, and Masterleo, a Columbus-based food and dairy industry service provider, to provide eight training courses for the dairy industry nationwide during 2014.

When it comes to shale development, “Knowledge is gold,” said Kaye Clay of Harrison County. “We are here to serve the industry, but these relationships also benefit us and especially our student training and faculty research.”

• Membrane Specialists LLC of Cincinnati, which recently installed a state-of-the-art membrane filtration system in the Food Industries Center. The technology can filter, purify and separate components of liquids such as water, juice and whey.

• Anderson International Corp. of Stow, Ohio, to install a customized single-screw extruder this fall. Extruders are used primarily by the snack-food, cereal and pasta industries to modify shape, texture, and flavor of end products. “We benefit because currently, we just have a twin-screw extruder,” Alvarez said. “And Anderson sees this as an opportunity to gain broader exposure for their equipment.”

“Extension has a well-deserved reputation as an honest broker,” said Mike Lloyd, Extension educator and the workgroup’s co-leader with colleague Chris Penrose. “By developing new research and delving into the issues, we can help bring different viewpoints into the discussion and help Ohioans make better and more informed decisions.”

In 2013, the workgroup formed committees to give more focused attention to several issues related to Ohio’s shale development: landowner education, wealth management, environmental concerns and community issues.

As shale energy development expands its reach in Ohio, so does OSU Extension. By early 2014, more than 700 horizontal wells had been drilled in Ohio, with another 400 permits to do so granted by the Ohio Department of Natural Resources. The numbers grow weekly. Every well represents a series of decisions by Ohio landowners and holders of mineral rights. Landowners who live in the path of pipelines transferring gas and liquid products from the wells also face choices as they’re presented with contracts allowing the lines to be built on their land.

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When it comes to shale development, “Knowledge is gold,” said Kaye Clay of Harrison County. And Clay and thousands of other Ohioans consider Ohio State University Extension to be their go-to source for such information.

Since 2010, the OSU Extension Shale Energy Workgroup has provided unbiased, reliable information to landowners like Clay who have been approached to lease land for shale development. So far, more than 18,000 Ohioans have attended Extension-and university-sponsored shale meetings, learning about the process and ensuring their concerns are addressed.

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Learning more: go.osu.edu/shale_indownr
STUDENTS FIND **GETTING A MENTOR IS GOLDEN**

Call it a golden opportunity. Because that’s its name. And because, for two students in the College of Food, Agricultural, and Environmental Sciences, that’s what it’s been.

Stephanie Verhoff and Mike Hannewald, both seniors in sustainable plant systems in the Department of Horticulture and Crop Science, last fall were named two of 22 national Golden Opportunity Scholars sponsored by the American Society of Agronomy, Crop Science Society of America and Soil Science Society of America. The honor pairs each recipient with an industry mentor.

Verhoff, from Kalida, has worked with Dana Eaton, Ames, Iowa-based U.S. corporate manager for the plant biotechnology firm Biogemma. “His experience in the industry has given me a valuable perspective while trying to choose the right graduate school program for me,” Verhoff said. “He’s also been a great business contact.”

Hannewald, from Waterville, has teamed with Jacob Prater, assistant professor in the College of Natural Resources at the University of Wisconsin-Stevens Point. “He teaches several classes that are directly related to my undergraduate research in soil fertility and nitrogen management, and his graduate work was in that area also,” Hannewald said. “He has provided several suggestions and insights as I work on my research project, and I’m sure he’ll be helping me finalize my work in the coming weeks.”

Golden Opportunity Scholars get chosen based on their academic achievements and interests in agronomy and crop and soil sciences. The honor includes travel support to attend the three groups’ joint annual meetings in fall, where the mentors and mentees meet for the first time. Their relationship continues through the school year.

“I came back from the meetings with new contacts, new knowledge about agronomy and a better appreciation for the agronomic research that is happening all the time at public universities as well as in private industry,” Hannewald said.

“It’s been a great way for me to get a foot in the door,” Verhoff said. “It’s been a great experience.”

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**OHIO STATE ATI RE-ENVISIONS ITSELF: ‘THIS IS THE RIGHT TIME TO DO IT’**

The Ohio State University Agricultural Technical Institute ranks No. 1 in the U.S. in the production of associate degrees in agriculture and related sciences. But that’s not enough.

The College of Food, Agricultural, and Environmental Sciences has launched a “re-envisioning” process that seeks to solidify Ohio State ATI’s pole position in its field—and to better align it with changes in its student population, emerging industry needs and opportunities, and the future budgetary landscape. “This is not about tweaking or making little changes,” said Linda Martin, CFAES associate dean and director of academic affairs. “It is about shaping the future of Ohio State ATI, and this is the right time to do it.”

The process, Martin said, involves looking at programs in which enrollment has been declining, identifying new programs that should be added to address future needs, and making sure ATI adequately meets the needs of the two types of students it has: those pursuing two-year degrees and the increasing number of students who go on to four-year programs.

Other priorities include strengthening relationships with industry, seeking a better integration with other parts of the college and the university, and addressing budget constraints.

The re-envisioning initiative is led by a core team of 25 faculty and staff from the Columbus and Wooster campuses, plus two student representatives. After a series of retreats, workshops, town-hall meetings and surveys taking place early this year, the team will draft a document with recommendations that will be presented in May.

“I think everyone at Ohio State ATI views this as a positive step toward securing our institution’s future and as an indication of Dean McPherson’s strong commitment to our unique mission within the college,” Ohio State ATI Interim Director Jim Kinder said.

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MAURICIO ESPINOZA

Learn more: go.osu.edu/c8V
The college’s Chocolate Science class whets the appetite of students across the university. This year, the class attracted 115 students in the fall and another 112 in spring semesters, said lecturer Mary Kay Pohltschneider. The lure of chocolate draws students “who would never think about agriculture or food,” she said. “The class gives us the opportunity to introduce them to the idea that food is an agricultural product. It builds a bridge in their minds that there is a lot more to food than just going to the grocery store—and that is a benefit to food scientists, but also to the students that are so removed from the origins of their food.”

In addition, she said the class helps non-food science students understand “that processing isn’t a scary thing—it just provides necessary steps to make food something we want to eat.”

Sheryl Barringer, who currently serves as interim chair for the Department of Food Science and Technology, originated the class in 2007. “Students might take Chocolate Science or some of our other courses because they think they will be fun,” Barringer said. “But we hope to get them interested in the field of food science, not necessarily to recruit new students, but so they’ll graduate as consumers who know more about broader concepts—how food works, what products are made of, a bit of the chemistry.”

MOLDS, MUSHROOMS AND MANKIND

People accused of sorcery during the Salem Witch Trials weren’t really practicing witchcraft. Instead their strange behavior (muscle spasms, vomiting and hallucinations) has been attributed to the fungus ergot—the result of eating foods contaminated with the fungus, which can be found in rye, wheat and other cereal grasses. That’s just one of the interesting tidbits students in Tom Mitchell’s “Molds, Mushrooms and Mankind” class offered in the Department of Plant Pathology learn upon taking the course. Designed to teach students that fungi are “the most important organisms on the planet,” the course uses a variety of methods including lectures and group projects to help students customize their learning, Mitchell said. “After teaching them the basics of the course, why not allow students to customize their learning to work as a group to determine what they want to learn going...”
Students in Henry Zerby’s meat science course not only learn the biology and nutrition behind meat quality and animal growth, they also learn how to grill a mean burger, brats and pork chops.

The Barbecue Science class offered at Ohio State University’s Columbus campus and its Agricultural Technical Institute in Wooster provides students a hands-on learning experience that teaches them chemistry, food safety and life skills, said Zerby, a professor in the university’s animal science program.

The course, which includes weekly lectures and labs, teaches students about various cuts of meat and how to grade meat and assess quality.

“The goal is to provide students another way to think about science,” Zerby said. “It also enhances students’ life skills by teaching them how to cook, about food safety and how to stretch their budgets by taking lower quality cuts of meat and enhancing the flavors by adding marinades and rubs.”

Students also learn how to smoke brisket; grill poultry, beef and lamb; make a pizza on the grill; and how to grill fruits and vegetables.

The course is limited to 30 students and always has a waitlist of 20 students or more, Zerby said.

Industry professionals also take part in the course, with grills donated by Weber and much of the meat from animals raised on university farms. The course ends with a competition viewed by professional chefs who’ve been so impressed that they’ve taken note of some of the recipes students have devised.

“Working in groups is how they will work in their professions after college. And these are very creative students.”

Some of the projects students have created in the class include swabbing various surfaces such as a dog’s teeth and toilets to grow fungus, to working in groups to create the YouTube video “Zombie Ant Fungus.”

Now in its second year, the course has grown in interest. The first class had 32 students; the second attracted 52. And some students switched minors to plant pathology after taking the course, with at least one student switching his major to plant pathology, Mitchell said. TRACY TURNER

NEW FREE CFAES ONLINE COURSE IS HOT ON ITUNES U

Talk about teaching a big class. Nearly 300,000 students have accessed a new Massive Open Online Course, or MOOC, offered by the College of Food, Agricultural, and Environmental Sciences—enough to fill Ohio Stadium three times over.

“Intro Environmental Science,” which went live in February 2013, ranked fourth on Ohio State University’s 2013 top 10 iTunes U list based on total number of streams, browses, downloads and subscriptions.

“I wanted to be able to teach environmental science to a worldwide audience,” said creator and teacher Brian Lower, assistant professor in the college’s School of Environment and Natural Resources. “I don’t believe education should be exclusive to those individuals who can afford it, and iTunes U offers a great way to provide free world-class educational content to anyone, anywhere, anytime.”

MOOCs are free public online courses designed for unlimited participation. A 2012 New York Times story called them “a tool for democratizing higher education.”

iTunes U is a free Apple service for distributing and accessing MOOCs and similar content.

Lower said putting the course online, in addition to its bricks-and-mortar classroom version, lets him reach younger students and ones who might not have the chance to go to college.

“These are students who I would never have the chance to meet but may still be very interested in the environment and science,” he said. “It gives me a chance to reach these students, get them excited about science, and encourage them to pursue degrees in science, mathematics and engineering.” KURT KNEBUSCH

Learn more: go.osu.edu/IntroEnvSci
While Ohio State ATI is well known for the development of technical skills and knowledge, the development of the so-called “soft skills” has always been part of ATI’s curriculum, too. This hasn’t always been the case in the business world, and as soft skills become a higher priority for many corporations and institutions, Business Training and Educational Services (BTES) has stepped up to fill the training void. • Clients’ needs vary widely, but two cases in particular demonstrate how BTES has handled these challenges deftly.
If you think you lack creativity, can you still be innovative? BTES answers that question with a resounding yes.

Akron Brass, global manufacturer of firefighting equipment and emergency response products headquartered in Wooster, asked BTES to develop a training program to help employees incorporate innovation into their process for moving new products to market.

President Tom Hudak wanted to create a “culture of innovation” at his company and bring innovative products to market ahead of their competitors. Over the course of several days, Ohio State ATI facilitators worked with over 100 Akron Brass employees from various departments.

One of the most fundamental pieces of the training was to understand the difference between creativity and innovation. “People think that if they aren’t creative, they can’t be innovative,” said Melanie Garcia, corporate training account executive. “Engineers are concrete thinkers, but we wanted to help them see there’s a role for everyone at the table.”

While creativity is part of innovation, Garcia notes, it’s only one part. “Innovation is creativity plus process plus strategy.”

Akron Brass employees received a “playbook” of techniques to jump-start their creativity and generate new product ideas. Next they created a “screen” to sift out the ideas that were worthy of additional time and resource investment. Finally, they designed an implementation plan to bring the new products to market.

“Akron Brass has built a culture of innovation that will continue long after the training ends,” said Garcia. “They have done an outstanding job of taking what they learned and injecting it into the company’s daily processes.”

**LOOK AHEAD LEADERSHIP**

Let’s face it. Institutions of higher education are not generally known for responding nimbly to challenges. The College of Wooster, Ohio State ATI’s academic neighbor, proved the exception when it contacted BTES to develop a Leadership Academy aimed at succession planning.

The college wanted to create a formal program to help selected employees hone their leadership skills. After meeting with the college’s vice president of finance and director of human resources, BTES suggested a plan for a year of personal and professional growth, partnering with the OSU Leadership Center to deliver a portion of the program.

One of the unique aspects of the program was “field experience” sessions to help participants see how each division of the college advances the overall mission, making a shift from identifying solely as a member of a particular department and engaging with the college as a whole.

Senior staff mentors were paired with participants for the yearlong process, offering a leadership coaching opportunity for the senior staff as well as a collaborative opportunity for participants. This year’s participants will become mentors for next year’s Leadership Academy participants, thus continuing the learning process for both groups.

“Within the Leadership Academy, long-service staff can convey institutional memory and tradition, explaining to newer employees our traditions and why certain things are done. Younger employees who grew up in a high-tech environment can help other staff with technology issues and make them more comfortable with entrepreneurial, out-of-the-box thinking,” said Garcia.

Change is never easy, noted BTES Director Kim Sayers. But companies and institutions that make a commitment to embracing change definitely find the growing pains worth it.

**FRANCES WHITED**

A longer article about the College of Wooster Leadership Academy, “Look-Ahead Leadership,” by Laurie Stiekelmaier, Melanie Garcia, and Gary Thompson, appeared in the July–August 2012 issue of Business Officer, the monthly flagship magazine published by the National Association of College and University Business Officers in Washington, D.C. The article can be accessed online at tinyurl.com/BTESLeader.

People think that if they aren’t creative, they can’t be innovative. Engineers are concrete thinkers, but we wanted to help them see there’s a role for everyone at the table.” —MELANIE GARCIA

**BTES HELPS WIL RESEARCH TACKLE LEADERSHIP DEVELOPMENT AROUND THE WORLD**

WIL Research Human Resources Director Michelle Hartley faced a challenge. Her company, a contract research facility based in Ashland, Ohio, had acquired several companies in recent years—from Illinois to the Netherlands. Now she needed to help the managers at all the locations develop the skills necessary to lead teams with diverse backgrounds and expertise. She also wanted employees at the satellite locations to feel connected to the headquarters by sharing in the same training. And she had to work within a budget and multiple time zones to accomplish all of this.

After a year of meeting with training providers, she still hadn’t found a program that hit the mark. But when she met Melanie Garcia at an Ashland Chamber of Commerce event and heard her talk about the Leadership Academy her department was conducting for two local organizations, she was intrigued. The two met again and crafted the yearlong WIL Research Leadership Academy, with monthly sessions to build skills in such areas as understanding management styles, leading change, effective decision-making, coaching and motivating others, and giving constructive feedback.

“Last year we launched the Leadership Academy for 25 managers in Ashland, 11 in Philadelphia, and 10 in Den Bosc, Netherlands,” Garcia explained. “In 2014, we’ll train 25 more managers in Ashland and 10 in Chicago. BTES instructors will travel to all the domestic locations to deliver the training.”

Because Hartley needed Dutch-speaking instructors for the Netherlands location, Garcia connected with a European colleague to find Alexia Blokdijk, a Dutch leadership development expert. They worked together to ensure that the Dutch curriculum was similar to that in the U.S., while still allowing Blokdijk to adapt sessions to better reflect Dutch corporate culture.

WIL’s management team has reported improved communication, increased engagement at work, and better coaching and motivating skills—and the program is still in its early stages. MELANIE GARCIA
First one door opens, then another, and another.

Scholar Olivia Geoghegan makes every step count at the College of Food, Agricultural, and Environmental Sciences.

The first door opened when Geoghegan, a food science and technology major from Columbus, received the Velvet Ice Cream and Dager Family Scholarship. Established in 2009, the Velvet Ice Cream and Dager Family Scholarship provides annual awards to one or more students who enrolled in food science and technology and finished in the top quarter of their high school class. Geoghegan is the 11th recipient of the scholarship, which can be used for tuition or community/leadership programs.

Now a junior, Geoghegan realizes the scholarship’s impact: Without it, she may not have had the opportunities to participate in as many student leadership activities, a food production-focused study abroad trip to China last year, or research as an undergraduate associate.

“I probably still would have gone here, but maybe I would be working more,” she said recently. “It definitely helped with Study Abroad.”

Geoghegan keeps busy, serving as Food Science Club liaison to the CFAES student council, as a member of Ohio State’s team on the Institute of Food Technologists Student Association College Bowl, and on some undergraduate research projects.

“I am glad to have the opportunity to do this in undergrad than do it for the first time in graduate school or a job,” she said, referring to the research projects.

She works 10–12 hours per week as an administrative associate in the Food Science and Technology office and behind the counter in the Dairy Store in the Parker Food Science and Technology Building.

“Olivia is calm, solid. There are always some honor students you pick on when you need to get something done; she’s one of them,” said Yael Vodovotz, a professor of food science and technology and scientist with OARDC. “She’s going to represent our department well wherever she goes.”

Geoghegan intends to concentrate her career on product development, specifically distinctions. This year, another door has opened. She is looking forward to an internship at Cargill in Minnesota this summer.

Read about more students helped by donor generosity at cfaes.osu.edu/development/impact-giving/student-impact-stories.
Opportunities to mix, mingle and applaud achievement drew guests to two recent events from the College of Food, Agricultural, and Environmental Sciences.

The college welcomed about 250 scholarship recipients, their donors, faculty and staff to its Fall Scholarship Dinner in November. The annual event celebrates student achievement supported by scholarship donors.

Guests heard from Erica Cramer, an honors student from Asheville, N.C., and recipient of The Velvet Ice Cream Company and Dager Family Scholarship. Cramer, who graduated in December with a bachelor’s degree in food science, delivered a stirring speech about her mother’s struggles to support three children, all of whom are in college. She further described how her enrollment at The Ohio State University—made possible through scholarship donations—provided her with community service experience that gave direction to her career choice.

“I decided to focus my attention on improving convenience foods,” Cramer said, speaking from a stage that resembled an autumn forest. “So funding from scholarships allowed me to engage in opportunities like this, and they have allowed me to pursue research that will make foods healthier for people in the future.”

Other speakers were Jessica Shanahan, a senior Agricultural Communications major from Mechanicsburg, Ohio, André Dager of The Velvet Ice Cream Company and Dean Bruce A. McPheron. Guests also enjoyed The Ohio State of Mind, an a cappella group composed of Ohio State students.

About 130 alumni, donors and university leaders melted in Miami during the 2014 Orange Bowl Ice Cream Social in January. During the long-standing bowl trip tradition for the college, guests enjoyed premium desserts, beverages and a performance by a local steel drummer on a high-rise hotel pool deck. Dean McPheron discussed the college’s role in the But for Ohio State campaign and his vision for moving forward.

For details about giving in support of the college, contact the Development Office at 614-292-0473 or go to cfaes.osu.edu/development. MATTHEW MARX

MEET CHRIS DELISIO, CHIEF ADVANCEMENT OFFICER

Five months into his new position as CFAES Chief Advancement Officer, Chris Delisio is driving the college’s pursuit of more resources in the But for Ohio State campaign. The college has a $150 million share of the university’s campaign goal of $2.5 billion for programming and capital resources.

“My excitement of joining the College of Food, Agricultural, and Environmental Sciences has only increased during my first five months,” Delisio said recently. “The breadth and depth of this college, and its associated impact both in Ohio and the world, is truly amazing. I look forward to continuing to learn more about everything that is CFAES.”

Delisio has been working collaboratively both inside and outside CFAES, leading its entire development operation and providing strategic planning on the university advancement model within the college. Since joining the college October 7, Delisio has initiated new strategies for donor outreach, engagement and stewardship while overseeing the acquisition of new development officers and staff.

In addition to working previously at The Ohio State University Comprehensive Cancer Center-James Cancer Hospital and Solove Research Institute, he also worked for Ohio Wesleyan University, Ohio University and the University of Dayton. He has a Bachelor of Arts degree from Hiram College and a Masters of Business Administration from Kent State University.

Delisio can be reached at 614-292-8738 or delisio.24@osu.edu. MATTHEW MARX

Learn more: cfaes.osu.edu/development
Congratulations to our 2014 Alumni Award and Alumni Scholarship winners, presented on March 1. Not pictured here is the winner of the International Alumni Award, Muhammad Sarwar, PhD, Dairy Science, who was unable to attend the ceremony. We congratulate him and all of our awardees, and give special thanks to the CFAES Ambassadors for hosting our award winners.

Meritorious Service Award From left: Bob Hothem, BS, Agricultural Economics; James R. Helt, BS, MS, Agricultural Education

Distinguished Alumni Award In front, from left: Kevin D. Adams, BS, Animal Science, MS, Agricultural Economics; Ellen Bergfeld, BS, Animal Science; Herbert D. Floyd, BS, Agronomy. In back, from left: John R. Miller, BS, Dairy Technology, MS, Food Science; Robert J. Ramseyer, BS, Dairy Technology

Young Professional Achievement Award In front, from left: Marie Carity, BS, Agricultural Education; Anand Subramanian, PhD, Food Science and Nutrition; Allison Leigh Specht, BS, Agribusiness and Applied Economics, MS, Agricultural Economics. In back, from left: Matthew Pullins, BS, Agribusiness and Applied Economics; Tom Stannard, BS, Agricultural and Construction Systems Management

CFAES Ambassadors In front, from left: Michelle King, Community Leadership; Ben Rubinoff, Environmental Science; Meghan Parsley, Forestry, Fisheries and Wildlife; Zach Stephan, Culinary Science; Katherine Wenner, Animal Sciences; Devon Alexander, Agricultural Communication; Jill Tyson, Advisor. In back, from left: Stacie Seger, Agricultural Communication; Mike Hannewald, Sustainable Plant Systems; Eileen Gress, Agricultural Communication; Holden Hutchinson, Animal Sciences; Blake Spitznagel, Agricultural Communication; Colin Barclay, Sustainable Plant Systems
Sporting gray socks with scarlet block O’s, a graduation cap and gown, and a cane featuring Brutus Buckeye, Chandler moved his golden tassel from right to left during a ceremony in the college’s Agricultural Administration building.

“It’s with a huge measure of pride that we take these steps to recognize your successes in life,” said Bruce McPherson as he conferred the degree to Chandler. McPherson is Ohio State’s vice president for agricultural administration and dean of CFAES.

“Commencement day is one of the best days of the year. It’s a reflection of what is the university’s most valued product—our graduates.”

A horticulture major, Chandler entered Ohio State in the fall of 1940, when he pledged Alpha Zeta fraternity. To get to classes in Plumb Hall, west of main campus, he rode in the open back of a dump truck that had been used during World War I.

He remembers mowing the grass and planting garden plots around Ohio Stadium, but his fondest memory from college was meeting his future wife, Willette Price, while working at the student union. Their first date was an Alpha Zeta picnic. She wooed him with chocolate sodas she made at the union’s soda fountain; he brought her tomatoes from the campus greenhouses where he later worked.

After participating in ROTC as a sophomore and junior, his studies were interrupted by World War II when he was stationed in Southeast Asia. After the war, Chandler returned to his studies at Ohio State for one quarter. He then returned to the family farm and pickle factory near Medina, Ohio, where his parents had worked on their own while he and his two brothers were at war.

Chandler took on management of the factory, which supplied pickles to Cedar Point, Isaly’s (a dairy and restaurant chain started in Mansfield, Ohio), and other small businesses that would sell pickles from barrels or repackage them with their own labels.

With just a few quarters shy of earning his degree, Ohio State considered Chandler’s life experience in deciding to confer the Bachelor of Science degree, McPherson said.

“Clearly I hear experience in engineering, food science, marketing and the transportation supply chain,” McPherson said, as he listened to Chandler’s stories. “You have certainly met our requirements for internships before graduation.”

When asked what advice he would give to incoming freshmen, Chandler said, “Don’t look for the easiest way. You learn more from hard work.”

Chandler, 92 years old, still lives on the family farm near Medina, Ohio. Farm Packt Pickle Co. closed in 1992, and the factory now houses his collection of antique and classic cars. In fact, Chandler still drives the Model A he drove on campus in the 1940s. His two daughters and their families joined him for the ceremony.

SUZANNE STEEL
Greetings friends,

I spend a lot of time with employers of our graduates—this past month at career fairs here in Columbus and in meetings with companies in New Orleans and Minneapolis. They value our interns, and they often recruit their next employees from those interns. Not only do employers praise the technical skills of our graduates, but they also note their communication, leadership and teamwork skills.

The single most valuable product of the business of education is our graduates. That’s why we work so hard to recruit new students. That’s why we work so hard to offer the best class experiences. That’s why we send our students on internships, to do service learning in communities across the country, and to learn about the world through more than a score of international class experiences.

The vast majority of our graduates progress quickly from their freshman year experiences to their graduation day to their first job. Sometimes, however, the pathway is a bit different. The story in this issue of Ted Chandler and his path toward his Ohio State degree demonstrates that, while we are often flexible with students on their route to a degree, one thing does not vary—we expect excellence.

Our graduates are our product, and we stake our reputation on producing an excellent product. Whether it takes four years or nearly four decades, an Ohio State degree carries with it a guarantee of accomplishment.