The economic downturn has families across Ohio focusing on finances with a keener eye than ever. Often, they turn to Ohio State University Extension.

“We’re educators, first and foremost,” said Nancy Hudson, family finance specialist with OSU Extension. “When we work with people, even those facing bankruptcy, they tell us they appreciate our straightforward, nonjudgmental approach.”

Among the programs that OSU Extension offers is New Start for Financial Success, a debtor education class for people facing bankruptcy. Often, attendees say if they had taken the class earlier, they might have avoided bankruptcy, Hudson said. For more information, see http://newstart.osu.edu.

Extension is focused on helping young people, too. Besides the “Real Money, Real World” program (see story on page 2), OSU Extension is a national partner in sponsoring the High School Financial Planning Program. Since 2007, OSU Extension has helped train more than 600 teachers in this free curriculum, which meets the standards of a new state law that requires personal financial education programs for students entering high school in 2010.

OSU Extension also offers a wide variety of free and low-cost materials to help families with financial management, online at http://ohioline.osu.edu and http://estore.osu-extension.org. And even more guidance is available through Extension’s national resource, eXtension (pronounced e-Extension). On the “Financial Crisis” pages (http://www.extension.org/financial_crisis), dozens of materials are available including “Deciding Which Bills to Pay First,” “Stretching Your Food Dollar,” and “Debt Management in Tough Times.” The web site also offers the opportunity for users to submit questions to Extension experts from across the nation for guidance on specific financial challenges. See more on eXtension on page 3. ■ MARTHA FILIPIC
OSU Extension’s Signature Programs target key statewide, national issues

As part of its Strategic Planning process for 2008–2014, Ohio State University Extension identified six “Signature Programs” focused on targeted issues that affect Ohioans. Every county in Ohio will offer at least one of these programs, three of which are described on these pages. Look for details on the other three programs, “Dining with Diabetes,” “New Start,” and “Why Trees Matter: Next STEP” in our last issue of Continuum, available online on the college’s alumni web site at http://cfaes.osu.edu. To learn more about Extension’s Signature Programs, go to http://extension.osu.edu and click on the Strategic Plan Information icon on the right. Then click on Step 7, which includes descriptions of the Signature Programs.

Economic initiative sustaining Ohio communities

In Auglaize County, a business expansion reinvested $2 million in the county and added 22 jobs; in Clinton County, the closing of a plant was reversed, saving 100 jobs; and in Fayette County, over $80 million in investments resulted in a 31 percent increase in manufacturing employment.

From the small neighborhood of Linden in the northeastern part of Columbus, to the town of Van Wert, to an eight-county region in eastern Ohio, an Ohio State University Extension business program is helping communities realize the importance of building the link between residents and businesses for economic growth and sustainability.

The OSU Extension Business Retention and Expansion Initiative, one of OSU Extension’s Signature Programs, was created to strengthen the capacity of local officials and community volunteers to better understand and manage their local economy. The program originated from Ohio State’s Department of Agricultural, Environmental, and Development Economics.

“You need to understand your economy if you are to have any influence over it,” said Greg Davis, leader of the OSU Extension Business Retention and Expansion Initiative and associate professor in community development. “The program engages communities in a formal survey process to identify strategies that will help local businesses remain profitable and expand.”

The ultimate anticipated outcomes, said Davis, are a more engaged community, a database of local information, and a more robust local economy.

Since 1986, the Ohio Business and Retention Expansion Initiative has worked with more than 140 communities, empowering them to act on economic development issues by gathering information critical to understanding local and regional economic development needs.

For more information on the OSU Extension Business Retention and Expansion Initiative, see its web site at http://localecon.osu.edu/brne. CANDACE POLLOCK

Students get an eye-opener with “Real Money. Real World.”

Alarming levels of debt, bankruptcies, and foreclosures throughout Ohio add up to a clear conclusion: The state has a vital need for financial education. And starting early is key: A 2008 national survey revealed high-school seniors could correctly answer just 48 percent of questions on financial basics such as credit, savings, insurance, and retirement.

That’s where “Real Money, Real World” comes in. In 2005, a group of OSU Extension professionals developed the six-lesson curriculum to help young people become aware of the money-management skills they’ll need for the rest of their lives. Designed to be a partnership of local Extension educators, schools, and community volunteers, the program focuses on basic finance principles, including how education and occupation affect income; how expenses and paycheck deductions add up; and how to be smart in using checking accounts, savings, and credit.

And it works.

“In 15 years of teaching, I can say without a doubt that it is one of the best tools I’ve ever had in the classroom,” said Beth Melegari, seventh-grade teacher at Northwestern Middle School in Wayne County.

In “Real Money, Real World,” students assume the role of a 25-year-old adult. They choose (or are assigned) one of 108 occupations with a corresponding salary, and find out how many children they’re raising.

After initial lessons, the program culminates in a real-life hour-long simulation: The students visit various booths staffed by community volunteers to pay for their housing, utilities, child care, transportation costs, insurance, phone and Internet access, groceries, and other items typical in a family budget.

“The program really has an impact,” said Beth Bridgeman, OSU Extension educator in Greene County and one of the program’s original creators. “After the simulation, they say they realize they’ll have to stay in school longer and delay having kids — it’s a valuable tool.”

The “Real Money, Real World” curriculum is available on CD from OSU Extension at http://estore.osu-extension.org. For more information, see http://realmoneyrealworld.osu.edu. MARTHA FILIPCIC
Online ‘eXtension’ puts resources at nation’s fingertips

The nation’s 95-year-old Cooperative Extension System reaches millions of people every year through the efforts of more than 100 land-grant colleges and universities and thousands of Extension offices dotting the U.S. landscape. But the reach of Extension has the ability to multiply exponentially with a national online presence, http://www.extension.org.

The effort, called eXtension (pronounced “e-Extension”) launched in February 2008 and is designed to give users “the best of the best,” said Keith Smith, director of Ohio State University Extension and associate vice president for agricultural administration.

“People want information quickly — they want it now, and they want assurance that it’s reliable,” Smith said. “This use of technology is bringing us into the modern age.”

When Congress created the Extension system in 1914 to assist land-grant universities “extend” research-based information and educational programs throughout their home states, more than half the U.S. population lived in rural areas and nearly a third were engaged in farming. Over the years, Extension has branched out from agricultural and rural issues to reflect the changing needs of farmers, business owners, families, and communities. The seed of eXtension was planted in 2004, when Smith was chair of the national Extension Committee on Policy. Although most statewide Extension programs operate web sites for consumers, Extension had no national presence that brought together know-how from across the country. When such an idea came before Extension leaders, Smith and his counterparts pledged a small portion of their federal funding to pay for the effort.

Today, eXtension offers information and materials on topics ranging from traditional agricultural production to personal finance; entrepreneurship; gardens and lawns; parenting; organic agriculture; and science, engineering, and technology for youth. To compile the information, teams identified the most user-friendly Extension materials available from across the country, vetted them to ensure the information was reliable and credible, and created new materials when they identified gaps.

The site has thousands of frequently asked questions, searchable by keyword and browsable by category, and users also can Ask the Experts if they can’t find the answer to their specific question. In addition, users who register with eXtension are guided to their local Extension offices and their state’s land-grant institution for additional information and local guidance.

For more information and materials you can use, log on to eXtension at http://www.extension.org.
Micki Zartman’s passion to share the world of agriculture infects nearly everyone she meets, and that likely won’t stop even after she officially retires this year from her role as chair of Scarlet and Gray Ag Day.

The annual event, Zartman’s brainchild, was renamed “Micki Zartman Scarlet and Gray Ag Day” in 2007. This year, Zartman is assisting new chair Leslie Risch to plan for a record 590 school students — urban, rural, suburban, private, and public — converging on the College of Food, Agricultural, and Environmental Sciences campus May 15. Guided by 160 volunteer college students, participants will visit stations staffed by college faculty and staff to learn about agriculture’s role in everything from food and clothing to wildlife and biodiesel fuels.

The idea behind the event started years ago, when Zartman accompanied her husband David, who was chair of the then-Department of Dairy Science, to an annual dairy science meeting. One of the speakers challenged participants to share their stories: “The speaker said, ‘You talk to each other, but you don’t talk to the rest of the world.’ And I felt like she was looking directly at me,” Zartman said.

It wasn’t long before she was leading tours of the Waterman Dairy Center for local schools. The program was a huge success, but one year the science director at Worthington High School asked about other aspects of agriculture. The seed was planted, and Zartman worked with the teacher to plan the first Scarlet and Gray Ag Day in 1999.

The event goes beyond the average field trip. Organizers make sure the offerings link up with schools’ content standards. Teachers attend a pre-event workshop, and ag education students visit classrooms to conduct enrichment classes. This year, students from the College of Education and Human Ecology will also participate, making school visits and volunteering at the event.

The program is popular, with a waiting list of schools wanting to participate. Zartman credits her student co-chairs and volunteers from throughout the college. “Every year, I challenge the student co-chairs to expand the academic rigor and impact of the program,” she said.

Jill Tyson, college admissions coordinator, was a student co-chair in 2005 and also worked with Zartman in 2006 to prepare an A-to-Z handbook for future organizers. Tyson said working with Zartman was life-changing. “Her ability to work with and connect with all types of students is remarkable, and her dedication is inspiring,” Tyson said.

Zartman says her passion lies in the feedback she gets from Ag Day participants. Among the comments: “You come knowing little about ag, and leave knowing amazing things.” “It is the best thing I have ever been to.” “I am never going to forget it.” “It made me want to go to college.”

In addition, she remains deeply grateful for the support Ag Day has received from faculty, staff, and administration, and industry and commodity leaders.

Incoming chair Risch, who is also a program assistant for Farm Science Review, said Zartman’s passion for agriculture is contagious and inspiring, adding, “I hope she wants to remain part of Scarlet and Gray Ag Day for a long time.” — MARTHA FILIPC
Students come first for retired Animal Sciences professor

For Ohio State University livestock geneticist Keith Irvin, nothing is more gratifying than leaving an indelible mark on the hearts and minds of students.

“I love having the opportunity to work with students,” he said. “I always felt that if we provide students opportunities and encouragement and then get out of their way they would be successful.”

The Department of Animal Sciences professor, who retired at the end of January, influenced hundreds of students in the classroom and in an advisory capacity, and no doubt helped to shape their personal and professional goals.

Irvin joined the faculty in 1975 after receiving his Ph.D. in animal genetics at Ohio State University. Since then, he’s taught over 15 different courses and advised undergraduate and graduate students and contributed to student organizations. For example, he was instrumental in developing the national Sigma Alpha sorority during a time when agricultural sororities did not exist for women. Irvin has also conducted research in swine genetics. He is best noted for developing the Sow Productivity Index, which combines components of traits important for mothering ability in sows.

“Producers will use this selection tool to select females that will mother the next generation,” said Irvin. “It was satisfying to go through the process of doing the research on sow productivity to developing the SPI and then seeing it adopted by industry.” Throughout the years, Irvin has received countless awards for his success in the classroom, his affinity with students, and for his research, and has served on a number of university and community organizations.

Although retiring, Irvin looks at it as a new beginning and is looking forward to new opportunities that come his way.

“My retirement is not an end, it’s a new beginning and a new stage in my life. It’s a growing phase and a positive change while being an opportunity to look forward,” he said. “I’m looking forward to the new opportunities and will continue to maintain and develop new friendships.” ■ APRIL HAYES

Future student? Great way, great day to see CFAES

Thinking of enrolling in CFAES? Know someone who is? Consider the “Experience OSU for a Day” program, which offers one-day, one-on-one, inside looks at the college. Prospective students shadow a current student, attend several classes with them, eat on campus, and visit a residence hall. They meet with a professor who works in their area of interest. They talk to counselors and administrators. They leave with essential details — on financial aid, majors, and more — and a first-hand feel for the college. “Once (prospective) students are on campus and see what we have to offer, it’s a lot easier for them to decide if the college is right for them,” said CFAES Admissions Coordinator Jill Tyson.

A typical visit goes from about 8:30 a.m. to 3:30 p.m. But it’s fully adjustable. If you can’t stay that long, you can schedule a shorter stay. It’s totally up to you. So are the stops on the visit. The classes you go to and the faculty you meet with are set up based on your input and interests. Also, guests, typically a parent or parents, are welcome and included. They tour campus, have lunch with an administrator, and join you to meet with the counselors and professors.

The program’s personalized nature “really helped me make my final decision in that long college search process,” said Katelin Luthman, a freshman Food Science and Nutrition major. “It’s a one-of-a-kind recruitment experience,” said Ryan Conklin, a senior in Agribusiness and Applied Economics and Animal Sciences and one of the program’s host students. Prospective students see “that it really is possible to receive the individual attention they want and deserve, even at a large institution like Ohio State.”

Cost: free. Learn more at http://cfaes.osu.edu/visit. Or contact Tyson at (614) 292-8124 or tyson.46@osu.edu. ■ KURT KNEBUSCH
OSU alumnus expresses pride through old postcard collection

“The final verse of Ohio State University’s alma mater rings true just as much today as it did in 1902, when the lyrics were written. Time marches on. Change is inevitable. But the pride of Scarlet and Gray remains. For OSU agricultural alumnus Jerome Gundrum, this truth is best expressed through his collection of Ohio State University postcards. With some postcards dating back to 1905, the collection gives a glimpse into the evolution of what has become the largest university in the nation.

“It’s fun to see how the university has changed over the years. Reading the notes on the back of the cards and seeing the old postmarks and stamps is very interesting,” said Gundrum, agronomy major from the class of 1975. “I think back and while a student, I didn’t fully comprehend the enormity of the school and its status and worldwide recognition. ‘Time and change’ surely does show the positive impact Ohio State has had on my life.”

The Jefferson County, Ohio, native who now owns an old-fashioned soda shop in North Carolina enjoys sharing his postcards and other Ohio State memorabilia with customers.

“I am always amazed at the number of non-Ohio residents who are Ohio State fans with no educational association with the school, but still proudly wear the Scarlet and Gray,” said Gundrum. “This makes me even prouder to be an Ohio State alumnus.”

CANDACE POLLOCK

Looking for just the right job, internship, or Ohio State-educated employee? Check out the CFAES Career Services Center, which offers free expert assistance to CFAES students, alumni, and industry professionals. Students get help writing resumes and cover letters, preparing for interviews, and scheduling on-campus interviews. They meet companies at the college’s fall and winter Career Events, hosted by the center. There’s a free online job board called “Hireabuckeye” that’s updated daily and available 24/7. Individual advice and counseling sessions are offered as well.

“Hireabuckeye is available to any current student or alumni of the college and is good for life,” said Adam Cahill, Career Services program coordinator. “Anything that we know about, you will know about and have access to. If you are looking for a job or someone to hire, this is a great place to start.”

Employers, meantime, can post jobs to Hireabuckeye; can get candidate referrals; can see the resumes of selected candidates online; and can thoroughly plan their recruiting visits, both to the Career Events and at other times throughout the year.

The easy first step to start using the center is to register for Hireabuckeye at http://www.cfaes.osu.edu/career; click on the log-in logo.

Find the center in 100 Agricultural Administration Building, 2120 Fyffe Rd., on Ohio State’s Columbus campus. Hours: 8:00 a.m. – 5:00 p.m. Get further details at the center’s web site, http://www.cfaes.osu.edu/career; or contact Adam Cahill at (614) 292-1589 or cahill.71@osu.edu. KURT KNIEBUSCH
Cheesemaking Goes High-Tech

For those in the dairy business, “the power of cheese” lies in the product’s profitability. But much of cheese production is still done the old-fashioned — and not very cost-effective — way.

Now, food scientists Luis Rodriguez-Saona and Jim Harper have harnessed the power of science and technology to improve the quality of cheese and the efficiency of the cheese-making process.

The technique they’ve developed, using Fourier transform infrared (FTIR) spectroscopy, has been patented, and they’ve shown it is valuable not only for the cheese industry, but also for wider uses, such as quick measurement of phytochemicals in potatoes, tomatoes, and other plant-based foods, and rapid identification of food-borne pathogens.

With cheese, though, “the main objective is to predict flavor quality,” Rodriguez-Saona said. “But we’re also very interested in learning the chemical changes that take place during ripening.” FTIR more than fills the bill. The technology is important to Ohio, which is first in the nation in Swiss cheese production and ranks in the top 10 for production of all cheese (excluding cottage cheese).

Cheeses get their flavor from a complex matrix of compounds that develop during ripening. Still today, most cheese is graded by sensory panels of specially trained people who smell and taste the product.

“There have been many attempts to use technology to grade cheese,” he said. But those methods were costly, time-consuming, and required a substantial amount of skill and laboratory equipment. Using this FTIR technique is quick, and so simple that almost anyone could do it, Rodriguez-Saona said.

The technique is based on the principle that different chemical compounds respond differently when exposed to infrared light. These responses produce a fingerprint spectrum showing the sample’s overall chemical composition, including protein, fat, sugars, and moisture content and the type and amount of organic, amino, and fatty acids, all of which affect cheese flavor and texture.

Even better: The technology can predict the final product’s quality early in the ripening process, which, depending on the cheese, can last for weeks to years.

“We found that most of the changes during cheddar cheese ripening occur between the first 15 to 30 days.” Companies can use FTIR during the early stages of ripening to predict which cheeses will end up as high quality, and which will likely have to be diverted to processed cheese products.

“Manufacturers may even be able to take corrective steps to improve the final product,” Rodriguez-Saona said. “At the very least, they will be better able to manage their inventory.”

Much of the research has been made possible by funding from Ohio’s cheese industry, the Ohio Agricultural Research and Development Center and the Midwest Advanced Food Manufacturing Alliance (MAFMA). For more information on FTIR and its applications, contact Rodriguez-Saona at rodriguez-saona.1@osu.edu or (614) 292-3339. ■ MARTHA FILIPC

Luis Rodriguez-Saona is helping Ohio’s cheese industry go high-tech, boosting quality and profits.
What drives people to take risks? The answer may lie with genetics

Playing the stock market, starting a business, changing jobs, returning to school—it’s not uncommon to take economic risks for business success or personal satisfaction. But what drives some people to take chances, while others are content to stay the course? Ohio State University economists are using biology to increase the understanding of taking financial risks.

Researchers with the Department of Agricultural, Environmental, and Development Economics, and Ohio State’s College of Pharmacy, along with colleagues at the University of Missouri and Central Methodist University, are searching for a genetic link to risk behavior. “The economic theory concerning risk behavior is rather underdeveloped. There is the economic notion that much of the risks we take are related to income, experience, knowing the difference between bad outcomes and good outcomes, as well as risk-taking related to age, gender, and even height,” said Brian Roe, an Ohio Agricultural Research and Development Center behavioral economist. “But what does it all mean? We are trying to go deeper and are looking at the biological mechanisms that distinguish between those who are willing to bear risk and those who aren’t.”

Researchers are currently studying dopamine levels and the genetic variations that may influence the way dopamine moves in the brain. Dopamine is a neurotransmitter in the brain that, among other things, drives behavior, cognition, motivation, and reward.

“There is a process for receiving dopamine, breaking it down, and transporting it, all potentially driven by genetic variations,” said Roe. “What we would like to find is something like this: a genetic variation is tied to say, a certain dopamine receptor that drives differences in the risk behavior of young people, and over time that receptor tends to burn out. We could then make the correlation between a specific biophysical process and why older people tend to take fewer risks.”

The research is currently being funded through an OARDC SEEDS grant. ■ CANDACE POLLOCK

BioHio Research Park:
An economic engine takes shape

At a time of great economic challenges and opportunities for Ohio, OARDC is working with government and business leaders to capture and grow the enormous potential of the agricultural biosciences and transform it into new business ventures and jobs.

A unique effort in the Buckeye State, the BioHio Research Park—a business and technology center aimed at moving ideas and products from the laboratory to the marketplace in areas such as food safety, renewable energy and materials, and environmental remediation—is beginning to take shape on OARDC’s Wooster campus.

“BioHio will serve as a catalyst for local and regional development, supporting the creation of an agbiosciences industry cluster in northeast Ohio and propelling an economic shift appropriate to the new century,” said Jim Currie, program director for Ohio State’s Food and Agricultural Technology Commercialization and Economic Development Program (ATECH). “It will serve as a link to university research, providing space and support for private companies in the agbiosciences arena in addition to public and private laboratories and programs that complement and support this activity.”

Thanks to a $3.4 million grant from the Ohio Department of Development’s Job Ready Sites program to the city of Wooster, infrastructure improvements—new water, sewer, gas, and electric—are currently being made on the park’s main 95-acre site along Secrest Road. This site will eventually offer 540,000 square feet of building space, accommodating offices, labs, greenhouses, and technology development.

Additionally, renovation of Pounden Hall on the OARDC campus is expected to begin in April 2009. Funded by a $744,000 grant from the U.S. Department of Commerce’s Economic Development Administration (EDA), the Pounden Technology Development Center will provide flexible technology space for labs, offices, and prototype development for start-up firms and existing companies.

BioHio Research Park has also welcomed its first tenant. Cleveland-based Schmack BioEnergy—which develops biogas plants and manages anaerobic digestion of Akron’s municipal solid waste—is renting space from OARDC to build lab, demonstration, and testing facilities. The company is collaborating with OARDC’s nationally recognized compost experts to optimize new biomass conversion technologies. ■ MAURICIO ESPINOZA
OARDC IS FOREMOST ECONOMY ENGINE IN NEW ‘BIOECONOMY’: BATTELLE STUDY

The agricultural biosciences are considered a key driver of economic development in the emerging 21st century “bioeconomy.” And according to a study conducted by Battelle, the Ohio Agricultural Research and Development Center (OARDC) is “well-positioned for future progress in primary agbioscience opportunity areas” that will help expand Ohio’s economic development in the new century.

The Battelle study — which evaluated OARDC’s accomplishments and growth strategies in the 2004–2008 period — also concluded that OARDC is the foremost in-state driver of agbioscience research and development and credited the center’s efforts with placing Ohio on the forefront of this exciting area of economic opportunity in the United States.

“Because of OARDC and the support of multiple stakeholders across the state, Ohio has moved into an early leadership position in supporting agbioscience R&D as driver for economic development,” the report stated. “Since 2004, OARDC has been highly proactive in developing new programs, funding streams, infrastructure, and relationships that drive progress and expanding economic impacts in Ohio’s agbioscience economy.”

Battelle highlighted OARDC’s strategic decision to focus its efforts and resources on three signature research and development areas: Food Security, Production, and Human Health; Advanced Bioenergy and Biobased Products; and Environmental Quality and Sustainability. ▶ MAURICIO ESPINOZA

A few examples of the multiple ways OARDC is supporting Ohio’s economy include:

▶ Sustaining growth in Ohio’s $11.1 billion food processing sector by developing new functional foods, advanced ingredients, and packaging technologies.

▶ Generating $22 million in savings in the Ohio horticulture industry by advancing biocontrol fungicides versus chemical ones.

▶ Safeguarding poultry and egg production in Ohio via multiple technologies, thus securing an $861 million industry and 8,700 jobs.

▶ Leading the development of a new natural rubber industry with a projected economic impact of $130 million for Ohio.
Treadmill exercise stress testing is an important diagnostic tool for cardiovascular disease. Magnetic Resonance Imaging (MRI) technology is another essential diagnostic tool. Unfortunately, the two don’t mix. The ferrous metal components in a standard treadmill are not compatible with the very strong magnetic field generated by MRI equipment.

An ATI faculty member, John Arnold, has teamed up with researchers at The Ohio State University Medical Center to modify a treadmill so that it can be used in close proximity to an MRI exam table, enabling doctors to obtain high-resolution images of the heart while a patient is in the recovery phase immediately after reaching peak stress level.

In the treadmill being developed by Arnold and his team members (Eric Foster, Subha Raman, and Orlando Simonetti), magnetic components have been replaced with non-magnetic stainless steel, aluminum, bronze, and polymers.

Two years ago, Foster, a graduate student in biomedical engineering, was seeking someone with hydraulics experience to work on the project, and Internet searching led him to Arnold. Before joining the ATI faculty in 2003, Arnold spent 27 years as an engineer, developing off-highway equipment with complex hydraulic systems. He is an assistant professor and coordinator of ATI’s power and equipment, and hydraulic power and motion control degree programs.

The design challenges have been interesting, says Arnold. Most industrial hydraulic systems use oil as the hydraulic fluid. “In this kind of system, you don’t have to worry about corrosion, so the materials that are optimal for use with oil often contain high-strength steels,” Arnold says. For component prototypes, he looked instead at hydraulic systems that use water, which are common in the food processing industry. These water hydraulic components are constructed of stainless steel and polymers, which are more compatible with MRI environments.

One challenge of the project was to find a supplier who could produce these non-ferrous components. Through his network of industry contacts, Arnold was able to find one supplier, a manufacturer in England, who was willing to undertake the production of system components.

The treadmill is currently being tested and results look promising. After achieving peak stress levels, patients will be quickly transferred to the MRI, allowing doctors to capture high-definition images of the heart within 60 seconds. According to team member Simonetti, associate professor of internal medicine and radiology, the OSU Medical Center is the only place in the world performing treadmill exercise stress tests inside the MRI scan room.

— Frances Whitewad
It don’t mean a thing
if it ain’t got that bling

As on any campus, Ohio State ATI’s hallways and classrooms teem with young men and women clad in the ubiquitous college student ensemble of jeans and a hoodie. But on any given day, you are just as likely to see students attired in Western wear that spans the gamut from functional to fanciful.

And the Western style isn’t confined to students in production agriculture majors, either. Ashley Hines of Piedmont is a landscape contracting and construction major whose Western ensemble includes a lime green satin shirt and a leather belt of the same color, embellished with glittering metal studs and, of course, a large belt buckle. Completing the look is a black cowboy hat edged in pink and a green rhinestone cowboy boot necklace. “I acquired most of this to wear in the show ring,” says Hines, who shows pigs and cattle.

The big belt buckle is a very common sight at ATI, often combined with slim jeans and a plaid shirt for the lanky cowboy look. But even the guys can indulge in a bit of Western bling. Alex Dawes, a construction science major from Hudson, sports not just the big belt buckle but an elaborately tooled leather belt as well, and adorns his shirt with a silver-tipped bolo tie. “I’ve always dressed this way, because it’s a style that most people don’t wear, and I like trying to be different,” Dawes said.

“I have gone to several other colleges before coming to ATI, and I have not seen anything like it anywhere else,” said Rhiannon Schneider, an agronomy major from Grafton, who was sporting a bit of handcrafted bling herself—a gold boot bracelet adorned with charms. “You can’t find many students at other colleges who can get down and dirty and still be able to express themselves with cowboy bling.” — FRANCES WHITED

**ATI Turf Team is tops two years in a row**

If Associate Professor Dave Willoughby’s green hair provoked a few odd stares in the grocery store, it didn’t bother him one bit. The unusual dye job was his way of making good on a promise to ATI’s turf bowl team: Bring home the first-place trophy this year, and he would color his hair green.

The four-person team of ATI turfgrass students did just that, winning the 2008 college turf bowl competition that is part of the Ohio Turfgrass Foundation’s annual conference. The team from ATI won in 2007, too, the first year the competition was held.

The test consists of nine sections addressing the types of problems and challenges turfgrass professionals face on the job and pits teams from the five Ohio schools that offer associate degrees related to the turfgrass industry.

Team members Andrew Goehler, Lance Bailey, Jack Zoldak, and Renee Geyer tackled questions about such topics as turfgrass diseases, weed and insect identification, and the calibration of equipment used to apply chemicals, as well as questions related to accounting procedures, assets and liabilities, profitability, and other business management concepts.

“I am extremely proud of our students,” said Willoughby in an interview with the Wooster Daily Record. “Winning the Turf Bowl the first year was a great accomplishment. Being able to repeat and bring the trophy back to Wooster for the second year in a row is indescribable.” Willoughby is coordinator of ATI’s turfgrass management degree program and serves as faculty advisor to the Turf Club.

The winning team receives a traveling trophy that will be displayed for a year until the next competition. Team members also received individual plaques.

“People in the grocery store keep asking me if I lost a bet,” Willoughby said. “I tell them that I didn’t lose anything. I won.” — FRANCES WHITED
Alumni Society Basket Sale: Scholarship Fundraiser

Collectors of Longaberger Baskets: Do not miss this opportunity to add to your collection and help raise funds for the CFAES Alumni Society Undergraduate Scholarship Endowment. Jeannie Anders, an alum and Longaberger Associate, is donating $18 of every basket sold toward the endowment.

**Longaberger® Tall Tissue™ Basket with Lid**
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Baskets must be picked up in Columbus or Springfield unless you make arrangements for shipping ($12.00 in-state or $17.00 out-of-state insured shipping and handling). Contact Sandy Kuhn at 740-477-8702 or kuhn.37@juno.com with questions.

**Fallfest Scheduled for Sept. 12, 2009**

Alumni from the College of Food, Agricultural, and Environmental Sciences (CFAES) — including all ag, environment and natural resources, and ATI graduates — will be invited to participate in Fallfest 2009 when the Buckeyes will play their second game of the season against the University of Southern California Trojans. Game time has been announced as 8:00 p.m. We will meet in the French Field House three hours before game time for dinner, the annual silent auction for the CFAES Alumni Society Scholarship Endowment, fine fellowship with friends from years gone by, and of course the Buckeyes vs. Trojans contest in the stadium. We are participating again this year with the university-wide Reunion Weekend. Watch for the details in the summer issue of Continuum coming to you in early summer.

Game tickets will only be available to those alumni who are graduates of the College of Food, Agricultural, and Environmental Sciences and are dues-paying members of The Ohio State University Alumni Association, Inc. Tickets must be purchased with our tailgate event. You are limited to two tickets per household, not per membership. It is our desire to maximize the number of alumni who can attend Reunion Weekend. The person purchasing the tickets must be the person who uses the tickets. Anyone caught reselling their tickets may lose future rights to purchase football tickets through the Alumni Association and our society.

Alumni who receive season tickets via President’s Club, Buckeye Club, Faculty/Staff, Varsity O Men football, the Alumni Association’s lottery, or long-time season ticket purchase holders WILL NOT be eligible to receive tickets through the Society Reunion Weekend, but we hope you will join us for the tailgate. All applications will be double-checked with university databases to ensure compliance with this policy. We expect the demand for this game to exceed our supply and thus a lottery will be held to determine the ticket allocation. More details will be announced as we confirm all information for Reunion Weekend ’09.

In the meantime, reserve your Sept. 11-13 weekend now, and plan to be with us for Reunion Weekend and CFAES Fallfest. GO BUCKS!

**Alumni Board Update**

The CFAES Alumni Board has new officers!

Past President—Richard Leiss
President—Ann Ball
President Elect—James Leonard
Secretary—Timothy Osborn
Treasurer—Melissa Sanders

Are you interested in getting more involved with your alumni society? We currently have openings on the board and can always use some extra help on our committees. Contact Ray Miller at (614) 247-2745 or miller.64@osu.edu for more information.

**Spring Game Tailgate Set for April 25**

As this issue of Continuum arrives at your home, final plans are being made for the Spring Game CFAES Tailgate to be held on April 25. The tailgate will begin two hours before kick-off, expected to be 1:00 p.m.

Tickets for the game are $5. Tickets for the tailgate and game are $15.

If you would like to attend the game and or tailgate, please contact Amber Pasternak at pasternak.6@osu.edu or call her at (614) 247-2745.

The ABSOLUTE final deadline for reservations is April 20. Make checks payable to The Ohio State University and mail to:

Ray Miller
Room 100 Ag Admin
2120 Fyffe Road
Columbus, OH 43210
The College of Food, Agricultural, and Environmental Sciences Alumni Society recognized 15 alumni and friends of the college at its annual alumni awards luncheon on March 7, 2009, held at the Fawcett Center. A new Outstanding Service to the Society Award was established this year in addition to the four longstanding award categories. Congratulations to all of our recipients!

CFAES ALUMNI SOCIETY PRESENTS 15 WITH AWARDS

**Meritorious Service Award**
Vice President and Dean Bobby Moser, left, with award recipients Stanley W. Joehlin, B.S., Agricultural Engineering; and Bernie Erven, B.S., Agricultural Education, and M.S., Agricultural Economics.

**Distinguished Alumni Award**
In front, from the left, Vice President and Dean Bobby Moser with award recipients Charles V. Morr, B.S., M.S., Ph.D., Dairy Technology; Ted Flickinger, Ph.D., Agricultural Education; Dale F. Runnion, B.S., Animal Science; and in back, from the left, Burk A. Dehority, Ph.D., Agricultural Biochemistry; Blannie E. Bowen, Ph.D., Agricultural Education; Ben J. Lamp, B.S., M.S., Agricultural Engineering; and Russell Simmonds, B.S., Agricultural Economics.

**International Award**
Vice President and Dean Bobby Moser with award recipient Seung Il Na, Ph.D., Agricultural Education.

**Young Professional Achievement Award**
Vice President and Dean Bobby Moser, left, with award recipients Kenya N. Nicholson, B.S., Food Science and Technology; Lindsay Hill, B.S., Agricultural Communication; Jane Fife, B.S., Ph.D., Food, Agricultural, and Biological Engineering; and Jennifer Leheska, B.S., Animal Science.

**Outstanding Service to the Society**
This new award was established by the CFAES Alumni Society to honor individuals who have gone beyond expectations in providing service to the society. Vice President and Dean Bobby Moser, left, with award recipient Rod Bauer, KOVA of Ohio, and Ray Miller, CFAES Alumni Coordinator. Rod was selected for his unselfish contributions to Ag Fallfest and the CFAES Alumni Undergraduate Scholarship Endowment Fund.
Vice President’s Excellence Fund focuses on students

Thousands of alumni have supported the College of Food, Agricultural, and Environmental Sciences by making gifts to the Vice President’s Excellence Fund. The college’s annual fund provides discretionary monies for efforts including outreach, alumni relations, students’ co-curricular activities, and undergraduate research. In short, these gifts provide funding for projects that would not be possible without friends of the college.

CFAES alumni cite varying reasons for supporting the college with annual gifts, but they all had one main motivator in common: the importance of helping students.

For example, 1985 graduate Julia Gerken Zoldak was a scholarship recipient and said she gave to the fund to support future students. Joanne Captain Jones, who earned her B.S. in Ag Econ in 1975, echoed Zoldak’s sentiments. “I give because I’m an alum and I want to help support the school whenever I can,” Jones said, “I felt like giving because I attended Ohio State and to try to help. I feel it’s important to support the students.”

In addition to the desire to help students, career paths led some CFAES graduates to support the Vice President’s Excellence Fund. This was the case for Steven Wade Johnson, who earned his M.S. in Ag Education in 1979, also spoke of his parents’ influence on his philanthropy. “My parents always supported schools. My father was on the board of Ashland College, which is now Ashland University, and always donated even though he wasn’t a college grad. My parents were a big influence on my giving. It’s important to me to support my college.”

For Bob Agle, a 1980 Animal Sciences graduate, happy memories of his time as a student and belonging to a family of Ohio State alumni made him want to give. Agle regularly supports the Livestock Judging Team in addition to the Vice President’s Excellence Fund. “I normally give to the Livestock Judging Team because I was on it. It’s important to keep that going because I feel extracurriculars are what college is all about. Academics are needed but I was also in the marching band and on the judging team and I got a lot out of it. Those are the things you remember 30 years later. I know extracurriculars are the kind of thing that gets phased out. A lot of colleges had livestock judging teams and don’t have them now. Both of my daughters went to Ohio State and got a lot out of it. One daughter is in charge of beef promotion for the Cattlemen’s Association. My wife was in nursing and supports it. We’re all big Buckeye supporters.”

Support of the College of Food, Agricultural, and Environmental Sciences’ Vice President’s Excellence Fund is more important than ever before. As extracurricular activity costs soar and students already struggle just to fund tuition, books, and room and board, it is vital to support the college’s annual fund. For questions on giving to this fund, or to any CFAES fund, contact the Office of Development at (614) 292-0473.

AMY MCKENZIE

Charles Schollenberger creates fund for Arboretum Lab

Charles Schollenberger has made arrangements for The Ohio State University through a trust to contribute funds to The Ohio State University Foundation.

The gift shall create the Charles Schollenberger Arboretum Visitors Center Biological Lab Endowment. The annual distribution from this endowment shall be used to provide funds for programming and the purchase of biological lab equipment or supplies in the Biological Lab at the Arboretum Visitors Center at the Ohio Agricultural Research and Development Center (OARDC) in Wooster, Ohio. Funds can also be used for funding for the Charles J. Schollenberger Family Day to be held annually or biannually.

Charles’ grandfather, Charles J. Schollenberger, joined the staff of the Ohio Agricultural Experimental Station in 1910 and spent 47 years as an agronomist before retiring in 1958. He overcame deafness as a child to earn a bachelor’s degree in chemistry from The Ohio State University in 1925. His life’s work as a research pioneer led him to take known soil additives, such as limestone and manure, and determine how much was needed to enhance agricultural production. Between 1949 and 1957 Charles J. Schollenberger was associated with the U.S. Department of Agriculture Soil Conservation Service where he promoted efforts to save topsoil.

Schollenberger’s son, Charles S. Schollenberger, began a distinguished career in chemistry as a child when his father let him perform simple experiments in his laboratory at the Ohio Agricultural Experiment Station in Wooster. He went on to major in chemistry at the College of Wooster and earned a doctorate at Cornell University. Hired by the B.F. Goodrich Co. right out of graduate school by noted polyvinyl chloride inventor Dr. Waldo Semon, Chuck helped open Goodrich’s new research center in Brecksville, Ohio, in 1948. Over 10 years of patient research paid off in 1959 when Chuck proudly added his contribution to Goodrich’s long list of “firsts in rubber,” the development of “Estane®,” the world’s first thermoplastic polyurethane.

SHAWN CLEVELAND
NEW SCHOLARSHIP SUPPORTS URBAN GARDENING STUDENTS

Undergraduate students who are majoring in urban gardening will benefit from a new scholarship created by Dr. Helen Churella of Sierra Vista, Arizona. The Albert A. Churella Urban Gardening Scholarship has been established in memory of her husband, Albert. The $50,000 endowment will provide annual scholarship support to at least one undergraduate student majoring in urban gardening with preference given to students studying fruit and vegetable gardening. The scholarship reflects Mr. Churella’s passion for gardening. He was especially fond of growing blueberries.

**The Albert A. Churella Urban Gardening Scholarship** is one of two funds at the university that Dr. Churella has created to honor those most important in her life. The Anne Prochazka Endowment Fund for Oncology Nursing Education pays tribute to her aunt who was a nurse specializing in infant paralysis. Through her estate, Dr. Churella also plans to support cancer research, human nutrition research and scholarships, and research in biological sciences at The Ohio State University.

Dr. Churella is a three-time graduate of Ohio State, having received her undergraduate degree in biochemistry through what was then named the College of Agriculture. She went on to receive her master’s degree in biochemistry and her doctorate in human nutrition. She had a distinguished 37-year career with Ross Products Division of Abbott laboratories. She specialized in pediatric nutrition research and development, which led to patents for her work in providing selenium in a nutritional product and for her nutritional product for infants with chronic lung disease.

The College of Food, Agricultural, and Environmental Sciences is grateful for Dr. Churella’s generosity and is pleased to be a part of the Churellas’ legacy at Ohio State and in gardening.

Mr. Churella was born and raised in Patton, Pennsylvania. He served as a technical sergeant in the Panama Canal Zone during World War II, and as a flight engineer and staff sergeant during the Korean War. Between the wars, he attended the University of Minnesota. After his military service, he joined North American Aviation Corporation in Columbus, Ohio.

According to Dr. Churella, her husband always had a keen interest in gardening. Besides having a home garden in Columbus, he maintained gardens on their farm in Portage County, Ohio. He later became interested in blueberries. By the mid-1960s, Mr. Churella had planted over 600 blueberry plants on approximately 10 acres of the farm. Each spring, summer, and early fall, he would diligently prune and fertilize the plants. By the early 1970s, the plants were flourishing and producing an abundance of fruit. To this day, most are still producing a fine crop of berries. The plants are now cared for by his nephew who is very interested in maintaining the blueberry patch begun by his uncle more than 40 years ago.

“I am so happy to create a scholarship that will help students in my alma mater college,” said Dr. Churella, “and it would please Al to know that a scholarship in his name will help support a student’s career in urban gardening.” — Mary Yerina

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**Dairymaster gift benefits ATI Dairy Lab, students**

Dairymaster™ USA Inc. of Cincinnati, Ohio, is contributing a new 10 Unit Entry Level Swiftflo Dairy Parlor to The Ohio State University Agricultural Technical Institute (ATI) in Wooster. The gift of $231,405 consists of gifts-in-kind including consulting, dairy equipment design, layout, specifications, and equipment.

The ATI Dairy Laboratory was designed to give students in the two-year Dairy Cattle Production and Management Technology program practical experience in the management tasks encountered on many of today’s dairy farms. Students are required to work and to assist in the management of the laboratory on a daily basis as part of their practicum course. The laboratory is also used extensively for instruction in other courses such as dairy cattle production, genetics, nutrition, reproduction, health, judging, and presentation. The herd consists of Holsteins, Jerseys, and Brown Swiss, with 125 mature cows and 100 young stock. It is a free-stall barn with total mixed ration feeding.

“This is an outstanding opportunity and this relationship between the university and industry needs to continue to help our students work with the latest technology,” said Steve Nameth, director of ATI.

Operating since 1968 from its head office in Causeway, County Kerry, Ireland, Dairymaster is one of the world’s leading dairy farm equipment manufacturers. This year also marks the tenth year Dairymaster has operated in the United States.
As you’ll see illustrated throughout this publication, the College of Food, Agricultural, and Environmental Sciences (CFAES) is focusing its efforts on three Signature Areas of key importance to Ohio and the world:

**Food Security, Production, and Human Health** Every day more than 860 million people go hungry worldwide. Malnutrition is at critical levels in developing countries, while obesity plagues developed nations. The safety of our food, threatened by disease or contamination outbreaks, is a concern. As a result, CFAES focuses on improved agricultural production that ensures an adequate and affordable food supply; safeguarding our food supply; and promoting the basics of nutritional health for a growing population.

**Environmental Quality and Sustainability** Sustaining population and economic growth must be balanced with preservation of natural resources and environmental assets. Linked hand in hand with environmental sustainability is an urgent need for the development of ecologically benign resources for economic activity. In this Signature Area, CFAES works to understand, protect, and remediate the environment and ecosystems to ensure long-term sustainability.

**Advanced Bioenergy and Biobased Products** With global fossil fuel prices at record levels and concerns regarding carbon emissions, the race is on to develop renewable energy sources with nominal environmental impacts. The country’s desire to limit its dependence on overseas oil sources also fuels the development of alternative sources for the plastics, chemicals, and rubber industries. As such, CFAES will focus on developing biomass-based advanced energy technologies and value-added biobased products such as fuels, specialty chemicals, and fiber products.

We believe that focusing on these issues puts our college’s best and brightest to work on key issues affecting our world. As always, I appreciate your feedback: moser.2@osu.edu