

STUDENT AND YOUTH SUCCESS



Hands-on learning was at the center of A.B. Graham's first boys' and girls' agricultural club in Springfield, Ohio, in 1902. Youngsters planted seeds in experimental plots, tested the soil, and identified weeds and insects. They studied scientific theory and presented findings to their peers. Today, nearly 290,000 young Ohioans participate in 4-H clubs; camps; and school-enrichment, after-school, and special-interest programs. All are provided with ample opportunities for experiential learning. At the same time, by addressing real-world challenges, The Ohio State University's College of Food, Agricultural, and Environmental Sciences prepares students to successfully progress into worthwhile careers.

EXPERIENTIAL LEARNING: A 4-H SUCCESS STORY

When Jacob Shuman was in elementary school, he sometimes tore his homework into pieces in meltdowns of frustration. Adopted as an infant from Guatemala, it took years for Jacob's fetal alcohol syndrome to be diagnosed, which explained his unusual learning disabilities: He could add, but not subtract; multiply, but not divide. He'd understand a concept one day and forget it the next.

For a short time, he enjoyed participating in Cub Scouts with his dad and his brothers. But his mom felt left out and enrolled Jacob, then 6, in Ross County 4-H. It was a fateful move.

Soon, the three boys and parents were involved in one club as a family. Jacob took various projects: meteorology, insects and goats. He became a club officer, requiring him to practice public speaking. The hands-on learning and boost in confidence he experienced in 4-H helped him do better in school. At 13, he took the 4-H beekeeping

project. In four years, one hive grew to 14, housing hundreds of thousands of honeybees.

Along the way, Jacob created TEACH B's: Teens Educating Adults and Children about Honey Bees, in which he gives demonstrations not only about the importance of honeybees, but also about eating plenty of the fruits and vegetables they pollinate and adopting other healthy



Jacob Shuman

living habits. He speaks at schools, libraries and anywhere he can. So far, he has reached more than 500 people.

For that outreach effort, Jacob, now 17, was awarded the national 2016 Youth in Action Award in agriculture and animal sciences, and a \$5,000 scholarship from the National 4-H Council. At Jacob's request, an additional \$5,000 award that went to the Ross County 4-H program will be used to fund scholarships for 4-H members interested in taking up beekeeping, which requires a significant investment for hives, bees and equipment.

Jacob plans to use his scholarship to attend The Ohio State University Agricultural Technical Institute in Wooster to study under bee researcher Reed Johnson, and then continue his education on the Columbus campus for a degree in entomology and Extension. Several companies have already expressed interest in offering Jacob summer internships as he pursues his education.

More: go.osu.edu/shuman2016



THE OHIO STATE UNIVERSITY

COLLEGE OF FOOD, AGRICULTURAL,
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INNOVATION LAB LIGHTS A SPARK

It's not quite Silicon Valley, but for rural Hardin County (population 31,641), it comes close.

A large portion of the Hardin County Extension office is now the Spark Lab Innovation Center. Inspired by the "Maker Movement," the lab is designed to spark creativity, innovation and hands-on learning in young people and local entrepreneurs.

Among other technologies, the lab is home to a 3-D printer (the county's first), a handful of drones, GPS units, LEGO robotics kits, a smart board, a laser cutter, a video conferencing seminar room, iPads, and a video production lab with an HD video camera, a green screen and a computer with Final Cut software for video production work.

The space is possible thanks to a \$49,000 innovation grant from eXtension, a nationwide Cooperative Extension System organization, and a \$23,000 Columbus Foundation grant. Broad community support from a property tax levy provides a secure base, allowing staff to pursue such additional funding.

By hosting regular sessions such as Tech Tuesdays and Workshop Wednesdays, and special programming via projects ranging from sewing and art to robotics and rocketry, the space has hosted nearly 1,000 young people and adults in its first year of operation.

More: go.osu.edu/hardinspark

OHIO 4-H PETPALS: ENHANCING HEALTH THROUGH HUMAN-ANIMAL CONNECTIONS

Residents in senior facilities often feel lonely and cut off from the world. Meaningful interaction with young people and pets can provide stress relief, comfort and companionship.

That's where 4-H PetPALS comes in. The Ohio 4-H PetPALS program — People and Animals Linking Successfully — was developed in the late 1990s to teach 4-H members the skills needed to interact with residents of health care facilities,

particularly nursing homes and assisted living, and prepare their pets for such visits. It has since expanded to include visits to schools, hospice programs and colleges during finals. In 2015–16, 181 4-H members, with the oversight of trained adult volunteers, brought pets to visit an estimated 5,500 Ohioans in 35 counties.

Besides learning how to socialize and train their pets, 4-H members undergo sensitivity training to learn more about seniors and people with disabilities. Ohio State research shows that 4-H PetPALS participants are more empathic and compassionate toward seniors and have a keener sense of understanding, respect and appreciation for them. Ohio's 4-H PetPALS participants can earn an American Kennel Club Therapy Dog title, the only 4-H project in the nation so recognized.

Even more, the program provides therapeutic relief from stress and loneliness to Ohioans of all ages.

More: go.osu.edu/petpals

OUR GRADUATES GET HIRED

With growing demand for skilled professionals in food safety and security, water quality, the global food market, and sustainability and environmental issues, the College of Food, Agricultural, and Environmental Sciences positions its graduates for success.

In a survey from the 2014–15 academic year, 92 percent of graduates reported either having a job or being enrolled in an advanced degree program within six months of graduation.

Of those graduates, 74.4 percent reported accepting positions in Ohio. The remaining graduates accepted

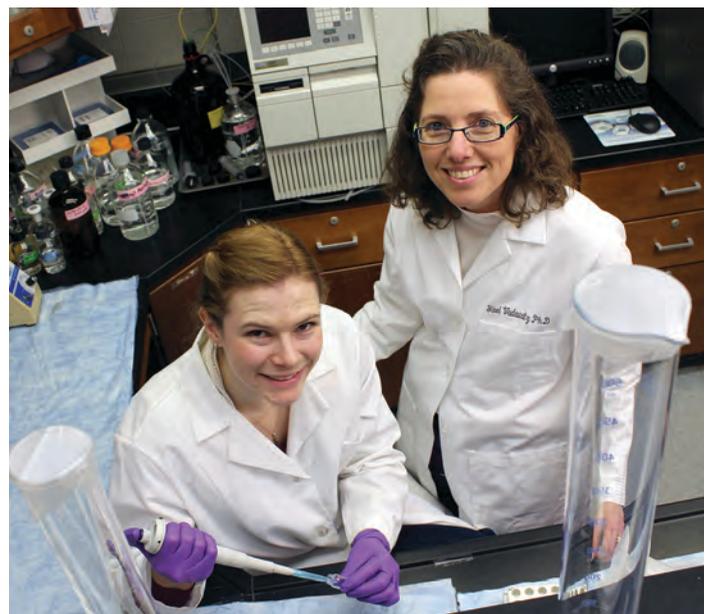


Emma Newell and Quincy

positions in 30 other states and six international locations. The overall average starting salary: \$42,184.

Graduates of the college's Agricultural Technical Institute also report success, with 97 percent either employed or transferred to a four-year, degree-granting institution within six months of graduation. Of those employed, 90 percent found jobs in Ohio, with an average starting salary of \$30,986 at 57 companies and organizations.

More: go.osu.edu/cfaesgraduates



Amber Simmons, graduate student (left), with Yael Vodovotz, professor (right)