



**Oregon State**  
UNIVERSITY

Extension Service

A Quarterly Newsletter for Friends of North Willamette Research and Extension Center

FALL 2015/WINTER 2016

## Agricultural Specialists from Africa Visit NWREC

Joe DeFrancesco, Director of the Specialty Crops Research and Registration Program at the North Willamette Research and Extension Center, recently hosted 13 agricultural specialists from Ghana, Kenya, Tanzania, and Uganda at NWREC. The guests were part of a USDA-Foreign Agricultural Service program that provides short-term training opportunities to agricultural professionals from middle income countries, emerging markets and emerging democracies.

The visitors were in the U.S. for three weeks, interacting with universities, government agencies and private companies to enhance their technical knowledge and skills in areas related to agricultural trade, agribusiness development, pest management, agricultural policy, and marketing. The group included chemists from national analytical pesticide laboratories, governmental agricultural field researchers, federal regulators, and representatives of horticultural associations within their countries. They were especially interested in learning about the relationship between University researchers, Extension personnel, and farmers in Oregon, and how research findings make their way into the hands of the growers.

All four of the African nations represented on the tour felt there was a disconnect in their countries between the researcher and the farmer. While at NWREC, the group learned of the many ways OSU personnel provide outreach and engagement with the agricultural community



*Joe in back row with his tour group from Africa at NWREC.*

and about the close working relationship we have between researchers, Extension Agents and Specialists, field representatives, growers, agrochemical companies, and state and federal regulators. The group was impressed with the diversity of crops and climatic regimes we have in our state and the size and agricultural diversity in the region.

The Specialty Crop Research and Registration Program (IR-4) gathers the data needed to request federal and state pesticide labels for minor crops in Oregon. Since most of the state's agricultural crops are not main commodities (like corn, soybeans, wheat, cotton, and potatoes), few pesticides are labeled for use by growers. Joe and his team work with the farmers and the industry to identify synthetic and organic pest management tools needed and, then, collect the efficacy (proof of

effectiveness) and residue data that goes to regulators. Over the years of DeFrancesco's career, he has had an increasing presence on the world scene in the pest management and pesticide registration and safety protocols. We are fortunate at NWREC to have Joe leading the way to bring the best science to pest management for agriculture in this region.

### Chal Returns from Denmark

Chal Landgren, OSU's Christmas Tree Specialist at NWREC, returned on October 1 from a six-month sabbatical in Denmark. Of all places in the world that produce Christmas trees, Oregon's industry is most similar to the country of Denmark for the approximate

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# Wiman Joins NWREC Team

By Kym Pokarny, OSU  
Extension and  
Experiment Station  
Communications

AURORA, Ore.—Oregon State University has hired a new orchard crops specialist to help the state's rapidly expanding \$91 million hazelnut industry, which grows 99 percent of the U.S. crop.

Entomologist Nik Wiman, who spent the last three years at OSU researching the brown marmorated stink bug, fills a position held for 30 years by Jeff Olson, who died unexpectedly in January 2014. Wiman is based at OSU's North Willamette Research and Extension Center in Aurora. He began his new position in mid-September.

"There's a lot of pent-up need by growers," said Mike Bondi, the center's director and a regional administrator for OSU's Extension Service. "Nik will be facing a lot of folks hungry for his help."

"The hazelnut industry is in a state of



Nik Wiman, OSU's  
new Orchard Crops  
Extension Specialist.  
PHOTO: STEPHEN WARD

extreme expansion," said Polly Owen, the director of the Hazelnut Industry Office. "Farmers are replacing other crops with hazelnuts and people new to farming are planting hazelnuts. In both cases, the need for basic facts about hazelnut production without bias from vendors who sell products is very important. The position requires a high degree of passion for the entire industry and a 360-degree view of all that makes up the industry. Nik has that."

The stink bug and eastern filbert blight are the two most serious problems for hazelnut growers, but other aspects of production need attention, too, said Wiman, who earned a doctorate in entomology from Washington State University.

"We have a very successful breeding program at OSU led by Shawn Mehlenbacher that has introduced blight-resistant cultivars," he said. "But we also need to address issues like soils, irrigation and pruning. There is a huge boom of orchards going in on marginal soil with questionable practices. I want to address that. I want to help the growers get the most production out of their trees."

Oregon hazelnut growers produced 75 million pounds of nuts and posted sales of \$91 million in 2014, according to Owen. More than half of the 2,730 acres planted between 2009 and 2012 were Jefferson, a variety released by OSU in 2009. Unofficial estimates, however, say the number of new acres during that time was 11,000 to 12,000, with more than half being Jefferson.

Hazelnuts won't be Wiman's only responsibility. He will devote some of his time to issues affecting fruit tree crops such as apples and pears.

"Nik has an excellent research pedigree and experience with Extension and outreach education," said Bondi. "He also has a very strong background in orchard crops and horticulture, so he can work across the range of fruit and nut tree questions and needs."

"Right now I'm in the listening stage," said Wiman, who will spend 80 percent of his job on Extension and 20 percent on research. "I've only been on the job for a short time and already I've had a lot of good interactions with industry people and a lot of support from the hazelnut commissions and organizations."

## Calendar of Events

**November 12 (8:00am-Noon):** Sprayer—Set up for Success. Location: North Willamette Research and Extension Center, Aurora. Contact: Peter Sturman. REGISTRATION NOW CLOSED.

**November 23 (5:00-8:00pm):** NWREC Advisory Council Meeting. Location: North Willamette Research and Extension Center, Aurora. Contact: Mike Bondi.

**December 7 (9:00am-Noon):** Blueberry Nutrition Workshop. Location: North Willamette Research and Extension Center, Aurora. Contact: Wei Yang.

**December 14 (9:00am-Noon; English) and (1:00-4:00pm; Spanish):** Blueberry Pruning Workshop. Location: North Willamette Research and Extension Center, Aurora. Contact: Wei Yang and Luisa Santamaria.

**January 7 (9:00am-3:30pm):** Whole farm planning to manage pests and minimize pesticide use in Christmas trees. Location: North Willamette Research and Extension Center, Aurora. Contact: Chal Landgren.

**January 12, 13, 14 (8:00am-4:30pm each day):** North Willamette Horticultural Society Meeting. Location: Clackamas

County Event Center, Canby. Contact: Nick Andrews and Chip Bubl.

**January 20 (Times To Be Announced):** Winter Farming Tour. Location: Polk County Extension office, Dallas. Contact: Nick Andrews.

**January 21 (8:00am-5:00pm):** Nut Growers Society Winter Meeting. Location: LaSells Stewart Center, Oregon State University, Corvallis. Contact: Nik Wiman.

**January 25 (8:00am-6:30pm):** Blueberry Conference. Location: Red Lion on the River, Jantzen Beach, Portland. Contact: Wei Yang.

**February 20 (8:00am-4:00pm):** Oregon Small Farms Conference. Location: LaSells Stewart Center, Oregon State University, Corvallis. Contact: Heidi Noordijk.

**March 9 (1:00pm-4:00pm):** Winter Vegetable Variety Field Day. Location: North Willamette Research and Extension Center, Aurora. Contact: Heidi Noordijk.



# Organic Blackberry Research Yields Significant Findings

By **Bernadine Strik**, NWREC's Berry Research Leader and OSU Extension Berry Specialist

Bernadine Strik and her team of colleagues, graduate students and Research Assistants have finished up their work on organic blackberry production systems at the North Willamette Research and Extension Center. Their 5-year one acre research field study was removed this past winter—but, not before yielding these key findings of importance to organic, as well as, conventional growers.

- It is clear that managing weeds in the blackberry row is critical to high yield. Plants grown without weed control had half the yield of those with weed control.
- 'Black Diamond', an important cultivar grown by conventional growers, was particularly susceptible to raspberry crown borer, whereas this pest was not found in 'Marion'. There are no economical methods for controlling this pest organically.
- It is important to train the new primocanes (i.e., vegetative and non-fruit bearing canes) in February, as August training increased yield loss to winter injury in 'Marion'. However, training time had no yield effect in 'Black Diamond', which is more cold hardy.
- We found that deficit irrigation—or, when plants were not irrigated in

August or September following harvest—had no impact on yield in either cultivar. This change in irrigation practices could save growers an estimated 50,000 gallons of water per acre per year.

Our research findings raised more questions about how these treatments impact root growth. Our last step in this study was to dig 7-foot-deep trenches to assess where the roots are located. Digital images of the walls of these trenches will be used to evaluate root depth, quantity, and location. This information will help us better inform growers about irrigation



*A back-hoe was used to dig 7 feet deep trenches parallel and perpendicular to the row to assess blackberry root growth. Amanda Vance, Faculty Research Assistant, provides perspective.*



*An over-the-row machine harvester, donated by Littau Harvesters in Stayton, was used to collect yield data from each treatment plot.*

and fertilizer management strategies for the different cultivars. We are excited that yields of the best performing organic systems were similar to those we'd expect in conventionally grown fields. This is good news for organic growers interested in growing trailing blackberry, machine-harvested for processed markets.

## Chal Returns from page 1 .....

number of growers and production, growing conditions, and tree species. In fact, over the years, the connections between these two locations have grown closely—multiple visits back and forth from both sides and several important collaborations on research and outreach have developed.

Chal's work in Denmark focused on three key priorities—1) noble fir cultural techniques to produce a more "open or natural" trees—something people talk a lot about in the PNW, but, our approach is to produce a much more heavily cultured or "trimmed" tree; 2) Nordmann and noble fir terminal leader control using plant growth regulators—this has been on-going research in Denmark initiated in that country and being investigated for PNW applications; and 3) publishing research and outreach articles and publications to advance the science and technology for the industry.

In addition, Chal delivered several educational programs for Danish Christmas tree growers and researchers and was able to participate in a biennial international meeting of Christmas tree researchers and Extension faculty held this past September in Norway.

OSU faculty are eligible for sabbaticals every seven years. The purpose of sabbaticals is to provide a break from the regular work schedule to focus on research, writing, or advanced study. Also, sabbaticals can provide the opportunity for travel and observation in the faculty member's field of scholarly or professional activity.

Welcome back, Chal!



# Harvest Dinner—another fun evening!

The North Willamette Research and Extension Center's tradition of hosting a fall, end of season, Harvest Dinner is growing in popularity. This October's event attracted 180 attendees—up 50% from the year before.

What began as a small garden party and thank you for those who are involved in NWREC's programs and activities, has steadily grown each of its four years starting in 2011 with 45 people.

"The Harvest Dinner has been fun to see grow. We really appreciate the community's interest in what we do at NWREC and their support," said Mike Bondi, the Center's Director. The 2015 Harvest Dinner included financial, endowment and in-kind supporters at NWREC, local farmers and cooperators, faculty and staff, eight state Legislators, three County Commissioners, a mayor, and College of Agricultural Sciences and Extension Service administrators from Corvallis.

As in past years, the dinner featured produce from the research, education and demonstration projects and leased land at NWREC. The menu is specially prepared each year by chefs at Bon Appetit Catering Company located at George Fox University in Newberg. Other special features at the dinner included the OSU Beaver Classic cheeses (made by students in the Food Science and Technology program), hazelnuts provided by the industry, and a smoked pig prepared by Ebner's Custom Meats in Canby.

We gratefully acknowledge the following businesses and organizations who helped sponsor this year's Harvest Dinner and make the event possible. The contributors included:

- Pacific Northwest Christmas Tree Association
- Oregon Department of Agriculture
- Friends of Family Farmers
- Northwest Transplants
- Oregon Blueberry Commission



Mike Bondi with the College's Associate Dean, Dan Edge, and Senator Richard Devlin (right).



This year's attendees enjoyed a time to reconnect with acquaintances and meet new friends.

- Oregon State University Extension Service
- Northwest Farm Credit Services
- Weather Café
- Pratum Coop
- Nursery Connection
- Oregon Hazelnut Marketing Board
- OSU College of Agricultural Sciences
- Willamette Valley Vineyards
- Oswego Hills Winery

According to Bondi, "It was a great meal and a wonderful time to give thanks to the many who help make our education and research possible here at NWREC. We couldn't be successful without the community we serve. It was a time to celebrate the harvest and a productive year. And, it was an opportunity to recognize achievements of the past year as we look forward to the next."

## 4th Annual Small Farm School Recap

**By Heidi Noordijk, Small Farms Extension Educational Program Assistant**

Eager learners, knowledgeable instructors, patient livestock, and sunny skies were the key ingredients to a successful day for small farmers in Clackamas County.

The 4th Annual Small Farm School had a record setting attendance of over 250 participants. Commercial farmers, small acreage landowners, students and agricultural professionals came together on Saturday, September 12 to build on their

farm skills and knowledge. Twenty-five percent of participants came from Clackamas County. Workshops took place at Clackamas Community College in Oregon City and, also, at the Clackamas County Event Center in Canby.

The day celebrated the tremendous innovation happening on small farms in the region and the diversity of small farms, as well as, the burgeoning interest in local sustainably produced food. Small Farm School is presented by OSU Extension in partnership with the Clackamas Soil &

Water Conservation District and Clackamas Community College.

There were 27 field and classroom workshops offered over four concurrent sessions. Extension faculty, community college instructors, conservation specialists, farmers, authors and other agricultural professionals led workshops. Morning classes on sheep basic care, on-farm veterinary care, horse health, and tractor safety and operation were held at the Clackamas Event Center. There was much more room for the animals and tractors at this location.

# OktoberPest Rolls On

If it's October, it must be OktoberPest time at NWREC. And, it was.

Five OktoberPest sessions were offered in 2015—every Thursday morning for three hours. The longer block of time provided the instructors the opportunity to go into more subject depth to make these classes more valuable for participants by providing skills to take immediately back to their work setting for implementation. This year's topics were all “hot” ones where growers needed for the latest information to manage nurseries and greenhouses, including:

- **Ash Whitefly Information Session:** We've been swarmed with another new pest in the Willamette Valley showing up for the first time last year. You've

probably seen the white clouds of insects flying around this fall. The whitefly has a wide host range which includes many ornamentals, native plants, and fruit trees. Little is known about how much impact from this insect we can expect. This class provided the latest information.

- **Germ Warfare:** Getting the most out of Disinfectants: Good sanitation practices are key to producing healthy plants and disinfectants are an important tool for maintaining sanitation. This workshop provided important information about the different types of disinfectants and their modes of action to better understand how to use disinfectants properly in nursery and greenhouse management.
- **Taking it to the Next Level: Advanced Insect Biocontrol for Nurseries:** This

class provided an opportunity for nursery growers who are experienced users of insect and mite biological control to increase the consistency and effectiveness of their existing programs and to expand their programs to cover additional pest species.

- **Bee Aware—Strategies to Protect Pollinators:** Information was presented on using key principles of Integrated Pest Management and an understanding of bee species and their ecology to reduce risks to pollinators in landscapes. Discussion included the use of specific tactics to mitigate harm and improve bee health.

OktoberPest 2015 was attended by nearly 180 nursery, greenhouse and landscape professionals, field workers, and educators.

## Farm Equipment Safety Training Consortium

Beginning in 2012, the North Willamette Research and Extension Center began offering youth farm tractor safety training classes. The training program was offered in conjunction with the OSU Extension office and 4-H program in Clackamas County. 4-H had been receiving requests for a certified tractor training program for several years, but didn't have facilities or instructors to offer the training.

NWREC has an ideal location, equipment, and staff who operate farm equipment daily—plus the desire to teach and share their knowledge. Since 2012, nine youth trainings have been taught to over 170 participants ages 14-17. The youth training is nationally certified and includes 20 hours of classroom and hands-on machine experience driving, backing, and working with 3-point hitch attachments. Certified students are being hired in the community by farmers needing assistance.

As the youth tractor safety training program has grown, demand for additional trainings has increased, too. Adults began requesting help. These included people new to farming or new to their tractor and wanting professional help to learn operation and safety principles. Basic skills were needed, but more advanced classes have been request-

ed, too. Hispanic language sessions, ATVs for farm uses, and forklift trainings have been suggested as additional areas for training in the future.

To meet these growing needs, a Farm Equipment Safety Training Consortium is being formed. The

Consortium of interested partners—individuals, businesses, organizations, and agencies—is coming together to sustain this educational effort. The Consortium goal is to raise \$30,000 annually to support the trainings, outreach, equipment needs and growth of this program going forward. The first Consortium partner committed to the effort is the Clackamas Farm Bureau Chapter with a \$2,500 contribution. Additional partners are invited to join with contributions of \$500 to \$5,000.

“We see the Consortium as a key element to promote the development of these trainings in the North Willamette Valley,” said Mike Bondi, NWREC Director. There is much more we can do within the farm equipment safety training area, but it all takes time and money. The Consortium will be the catalyst to create a strong and



NWREC's Derek Wells, Assistant Farm Manager, leads the tractor trainings offered to youth and adults.

on-going program we can ensure in the community each year.”

Consortium funding will provide the hiring of additional student farm help in the summer to free up NWREC's permanent farm team to manage the trainings. Also, Consortium funding will provide marketing and promotion resources for the program plus training equipment and materials.

According to Bondi, “I see NWREC becoming the leader in farm equipment safety training in the state—if not the Pacific Northwest. There just isn't anything like what we are planning that is available around the region.”

Anyone interested in learning more about NWREC's Farm Equipment Safety Training Consortium should contact Bondi. His email is michael.bondi@oregonstate.edu.



# A Very Fond Farewell

For the past six months NWREC has enjoyed two very special people—Bo Hu (known as “Cooper”) and his wife, Min. Cooper has been a Visiting Scientist working with Wei Yang, NWREC Berry Crops Extension Agent, since May 1st. Both Wei and Cooper—and Min, too—are all from China. Wei and Cooper have known each other professionally for the past several years. Cooper works at a field research center in China studying blueberry production. He came to the U.S. to study with Wei and work on aluminum toxicity issues in this crop.

Cooper’s work with NWREC ended in early November. He conducted studies evaluating the aluminum content of our naturally acidic soils and managed with cropping systems that foster low soil pH conditions—all contributing to the presence of high concentrations of aluminum and toxic conditions for blueberries.

According to Wei, “We are looking for ways to ameliorate the aluminum presence in

our acidic soils and find economical and effective ways to reduce aluminum uptake by the berry plants. This could change the ways we currently manage soil pH. Cooper’s work has been an important step in understanding this problem.”

Besides getting Cooper for the summer, NWREC also received Min. She joined her husband later in May and quickly asked, “If there was anything she could help with at NWREC.” She wanted to stay busy for the summer and be around the Research Center to enjoy time with her husband. Interestingly, Min’s professional background is in graphic design and marketing promotion.

We had no shortage of projects for Min to keep her busy this past summer—from taking photos (Min is also a very talented



photographer) at many of our educational programs throughout the summer, to designing the advertising and promotional materials for our Community Open House and Harvest Dinner, helping prepare our Art About Agriculture gallery, and developing informational brochures for the Center’s programs and activities.

A sincere thank you to Cooper and Min for being part of our NWREC family in 2015. We will miss you!

## Finding the Best Fall Planting Dates for Over-wintering Brassicas

There is strong local demand for fresh vegetables in late winter and early spring, especially for something other than kale. Other winter brassicas like cabbage, cauliflower and sprouting broccoli can survive unprotected in the Willamette Valley, but it is important to choose well adapted varieties, and transplant crops at the right time.

Research on over-winter cauliflower production by NWREC’s Del Hemphill in the 1970’s and 1980’s demonstrated that crops planted too early are susceptible to freeze damage on the coldest winter nights. Crops planted too late often survived, but were vernalized during the winter and had a small frame when curds were initiated the following spring, resulting in very low yield. Del also found that planting date in the summer did not affect harvest dates, but choice of cultivar did.

Growers and seed company representatives in the Willamette Valley that have experience with winter vegetable production know that despite strong demand they can be high risk crops. They have many questions about how to improve consistency of production and question whether these crops are profitable over time.

Nick Andrews, Heidi Noordijk, Amy Garrett (OSU Small Farms Extension) and Tanya Murray (Oregon Tilth) are teaming up with experienced local growers to identify reliable crops, varieties and production methods, and evaluate the profitability of winter vegetables. They are developing a winter farming workshop

series that will also address hoop-houses and row covers as well as field production: <http://smallfarms.oregonstate.edu/southern-willamette-valley-program/winter-farming>.

In collaboration with Bejo Seed, Johnny’s Selected Seeds, Tozer Seeds and Vitalis Organic Seeds we have planted several varieties of winter cabbage, cauliflower, sprouting broccoli, kale, fennel and endive. Selected varieties of each crop were transplanted every 2 weeks starting in mid-August (August 18, September 2, September 16 and September 30). All varieties were planted on September 2.

Hemphill identified September 1 as a good planting date for the North Willamette Valley, but claimed that this date should be adjusted for other regions based on local research. We are collecting data that will support development of degree-day models to predict growth stage at the beginning of winter, and spring harvest dates for popular varieties. The range of planting dates in our trial should help improve the robustness of our models. We hope to make these models available on the new CROPTIME vegetable degree-day website by 2017 or 2018: <http://smallfarms.oregonstate.edu/croptime>. We hope that degree-day models will help identify best planting dates in other regions.

For more information about the workshop series or our trials at NWREC contact Nick Andrews ([nick.andrews@oregonstate.edu](mailto:nick.andrews@oregonstate.edu); 503-913-9410). Your feedback on useful research questions and Extension activities is invaluable.

# New Approach Used for Pesticide Trainings

Over the past years during her nursery worker trainings, NWREC's Nursery Pathologist and Bilingual Educator, Luisa Santamaria, has become aware that Hispanic workers have a low passing rate when taking the private applicators pesticide license exam administered by the Oregon Department of Agriculture.

Luisa and her Educational Program Assistant, Gilberto Uribe, conducted a pilot training last fall to provide assistance to Spanish-speaking workers trying to get their licenses and, from that experience, have designed a new approach to learning for the Hispanic audience.

The class is a hybrid training that includes traditional face-to-face learning plus remote teaching through online resources that allow the students to progress at their own rate, become more familiar with the technology, and learn in Spanish over the course of four weeks.

"Our pilot class last fall revealed some interesting insights," said Santamaria. "It's really hard to expect Spanish-speaking people to be successful when the test they will take is partially in English, and the typical preparation for the test is a all-day training session, which can be a challenge for most." We are focusing on the areas that everyone struggles with the most, while helping them develop their test-taking skills, and providing them more time to process the information and learn new concepts.

Also, Santamaria and Uribe found that mathematics needed for pesticide calibration questions is one of the topics of most interest among the participants. Finally, since not all Hispanic workers have access to computers, greater familiarity and practice with technology was needed, because the exams are now also offered in a computer-based format.

A \$21,921 grant from Clackamas Extension's Innovative Grant program in



*Luisa Santamaria working with one of the students in the new hybrid pesticide training class for Hispanic farm workers.*

2015 has aided in the development of the hybrid pesticide applicators exam training launched in late October. The first cohort was kept small, consisting of 18 students, but this new approach will make it easier to reach greater numbers of students in the future. Santamaria and Uribe plan to assess the success rates of the most recent group of students and compare to historic trends in order to evaluate the new educational tools and methodology.

"My guess is that this training approach will be popular with our nursery and greenhouse workers," Santamaria said. "We have had a lot of interest already. We should know more soon."

# Genetic Engineering—one of agriculture's most important topics of the day

One of the more controversial issues facing Oregon agriculture these days is genetic engineering of plants and animals. And, although man has been altering the genetics of plants and animals for thousands of years in the world, more recent advances in biotechnology have raised questions about agriculture, how we produce the food for the world, and food safety.

In Oregon, we have seen counties voting whether or not to allow the growing of genetically modified crops in the past two years. Jackson County citizens approved a measure to ban genetically modified crops in 2014. But, a similar measure failed in Benton County just last May.

In the spring of 2014 the Dean of OSU's College of Agricultural Sciences charged a faculty committee to review and summarize key considerations related to genetically engineered (GE) organisms. The committee chose five topics that engaged faculty expertise and that reflected the public's interest regarding GE organisms in agriculture.

Committee members developed the white papers listed below as a service to the public for the purpose of providing information from several scientific perspectives. These papers have been reviewed by all committee members and are intended to help inform public conversations about genetically engineered organisms in agriculture. The publications are located on the NWREC website home page at <http://oregonstate.edu/dept/NWREC>. They are all a good and important read. I encourage everyone concerned about our food supply and the future of agriculture in our state and the world, to look these publications over.

- Defining GE organisms in agriculture
- How human values affect views on GE crops
- Food safety and regulations for GE organisms in agriculture
- Assessing the net social benefit of GE organisms in agriculture
- Implications of gene flow and natural selection in genetically engineered crops

## BES Summer Intern



Wei Yang, NWREC's Berry Crops Extension Agent, hosted one of the OSU Branch Experiment Station (BES) student interns last summer—Jackie Long, majoring in Agricultural Business. Jackie worked on a project evaluating a hand-held mechanical picking machine being field tested for harvesting fresh market blueberries.

Wei and Jackie are shown here at an OSU poster session featuring a dozen student interns sharing their work from last summer at Branch Stations around the state.

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Contact Director, Mike Bondi, for more information or to discuss life or deferred gifts options.  
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