This past June the North Willamette Research and Extension Center hosted a group of OSU College of Agricultural Sciences administrators and media for the formal announcement of the university’s new Global Hemp Innovation Center. OSU’s Hemp Center is the nation’s largest research program devoted to the study of industrial hemp and begins as a virtual hub that connects more than 40 OSU faculty across 19 academic disciplines throughout the university.

Earlier in the spring, a statewide hemp research field trial—examining planting densities and and rates—was established at 10 of OSU’s agricultural experiment stations located in the state (see Lloyd Nackley’s article on page 2).

Industrial hemp has the potential to become a major agricultural commodity in the United States and abroad with hemp plant fiber being used in manufactured products, including clothing, construction materials and packaging. Meanwhile, hemp seed oil is being investigated for use in pharmaceuticals, cosmetics, foods and nutraceuticals. For example, hemp has a long tradition of use...continued on page 2
in treating ailments by eastern medicine.

According to some hemp industry economic reports, the hemp-derived CBD market alone is expected to grow from $618 million in 2018 to $22 billion by 2022.

OSU’s new Global Hemp Innovation Center website (https://agsci.oregonstate.edu/hemp) has more details including a compelling short video about the exciting opportunities that lie ahead for this new agricultural industry in Oregon.

OSU Global Hemp Center Launch continued from page 1

Industrial hemp research and outreach at NWREC has been fast and furious since April! At that time, OSU planned to launch their Global Hemp Innovation Center and the College of Agricultural Sciences announced they wanted each ag research center across the state to establish replicated field trials to gain experience working with this crop.

At NWREC, the hemp research is currently being lead by Dr. Lloyd Nackley. Nackley says that he “feels like we’ve jumped on the hemp wave and it’s become a tsunami.” Through his interactions, he’s found that growers in our region are “curious, excited, cautious, and concerned with the new opportunities for a crop with roots in American agriculture, but had been blacklisted for nearly a century.”

While the ink was still drying on the new federal Farm Bill legalizing hemp, the OSU Global Hemp Innovation Center launched an ambitious program to conduct identical hemp research plots at OSU research centers across Oregon. Ten of OSU’s are participating in this project across all climatic regions of the state. The project, coordinated by Professor Jay Noller and Associate Professor Valtcho Jeliazkov looks to see how climate, seeding date, and seeding density affects the production of a grain hemp variety known simply as, X-59.

Lloyd took the initiative to join the statewide research efforts because he wanted to make sure his lab group could be able to provide growers throughout the North Valley with research-validated information to help with their new hemp management projects. And, Lloyd recognized the unique location of NWREC to attract a lot of attention for the Center with our proximity to Oregon’s major media market.

Also, Lloyd has partnered with Dr. Kristine Buckland, the Vegetable and Specialty Seed Extension Specialist at NWREC. Kristie is also keen to learn more about this new crop that will also impact her grower groups.

In addition to being a part of the statewide trials, Lloyd’s team has also begun growth comparisons of direct seeding hemp versus transplant production, testing the effects of biochar additives to soilless media, and looking at soil solarization as a non-chemical method for suppressing weeds. Currently, there are no-listed herbicides available to use with hemp. Lloyd’s research has attracted nearby growers and both US Senators in Oregon—Wyden and Merkley. Senator Wyden co-sponsored the farm bill language legalizing hemp production.

Calendar of Events

Caneberry Field Day, August 7 (1:00-5:00pm); latest research updates for raspberry, blackberry and blackcap raspberry growers and industry professionals—including focus on new fall-fruiting raspberry varieties.

Contact: Bernadine Strik.

Mechanical Cultivation Vegetable Field Day, August 29 (10:00am-4:00pm); field presentations, demonstrations showcasing equipment methods and new technologies for mechanical weed control in vegetable crops. Registration required ($25). See NWREC website. Contact: Heidi Noordijk.

Summer Vegetable Variety Field Day, September 12 (3:00-7:00pm); walk the field trials to examine summer vegetable varieties being evaluated this year (slicing tomatoes, sweet peppers, watermelons and cantaloupes); hear from seed company representatives and plant breeders. Taste testing included. Contact: Heidi Noordijk and Lane Selman.

NWREC Harvest Dinner, September 20 (5:15-8:45pm); annual showcase of NWREC research plus OSU food product development presented in an unique farm-to-plate dinner. By invitation. Table sponsorships available. Bring your friends, neighbors, business associates. Contact: Mike Bondi.

Please contact the NWREC office at 503-678-1264 for more information or visit the website at http://oregonstate.edu/dept/NWREC
New IR-4 Leader Named

Danielle “Dani” Lightle has accepted the position of Pesticide Registration Research Leader at the North Willamette Research and Extension Center. In this role, Dani will coordinate statewide IR-4 pesticide registration research work including efficacy and residue testing activities plus work closely with farmers and agricultural professionals to assess their pest management needs.

Dani earned her PhD at OSU in entomology, studying aphids in caneberry systems. For the past five years, she has been working as an Orchards Advisor for the University of California Cooperative Extension. She has been based in Orland, CA and serves the North Sacramento Valley. Dani’s work in California focuses on addressing the research and educational needs of tree fruit, nut, and olive growers.

Dani officially begins her new position with OSU on September 22 when she will be attending the national Food Use Workshop in Maryland and representing the pest management needs of farmers in Oregon. Dani’s first day at NWREC will be October 7.

In the meantime, Dani has begun conducting regular meetings with staff at NWREC and at OSU to become familiar with this summer’s IR-4 field trials and agricultural practices in the region. Also, Dani visited Oregon during the first week of August to meet with staff, review field trials, meet key stakeholders in the IR-4 program, and begin making arrangements for office and technology needs.

NWREC Open House on a Beautiful Summer Evening!

The Community Open House at the North Willamette Research and Extension Center has become a tradition over the past ten years. This is the time each summer when we throw open the gates at the farm and invite the public in to see what we are working on to support farmers and the agricultural industry here in the north valley area.

This year we were blessed with a beautiful summer evening—and a huge crowd. We counted 285 attendees, but know we missed some that were coming in the Exit gate since we were plugged at the Entrance!

We had our largest showing ever with educational displays and exhibits hosted by our NWREC faculty and staff, plus guests coming up from the Corvallis campus to share their expertise, too. Special thanks, as always, to our community partners for helping make this event a possible each year. Our partners this year included: Fir Point Farms (hay wagon for farm tours—love the orange and black surrey!); Pape Machinery (400+ HP tractor for driving demos—green and yellow goes well with orange and black!); Canby FFA (BBQ—always great food!); Canby Farms and Montecucco Farms (farm fresh veggies—nothing like ‘em; thanks, guys!)

Meet Maria Marlin

Maria Marlin began her work at NWREC this past June when she arrived to become Luisa Santamaria’s Faculty Research Assistant working in the Nursery Pathology and the Bilingual Education program. Maria completed her Master’s degree in Natural Resources, with a focus in Plant Pathology, at the University of Idaho, just prior to coming to NWREC.

Originally born and raised in the eastern U.S., Maria became fascinated with plants and pests when noticing the significant damage caused by the hemlock wooly adelgid in that part of the country. That interest in nature moved Maria more toward plant diseases and microbiology after college. She worked at a research technician position at Washington State University’s Tree Fruit Research and Extension Center in Wenatchee where she studied tree fruit diseases prior to pursuing her Masters.

Maria reports she is enjoying the wide variety of work Luisa is doing in her program from food safety issues to nursery worker education and soil and plant health questions. “I love the diversity of topics we are working on. There will be something new most days!”

Maria’s other early impression includes the diversity of research, topics and people at NWREC. “At Wenatchee everything was tree fruit with about the same size of staff. But, here it’s amazing to see all the different work being done from nursery and greenhouse, to berries, Christmas trees, pesticide research, and field crops—plus tree fruits and nuts.”

Maria says she loves the Pacific Northwest having lived and worked in Washington, Idaho and, now, Oregon. Welcome to our area, Maria!
The North Willamette Research and Extension Center has a history of hiring summer students each year to help with field work, collect data, and support education programs. Faculty needing help during the busy summer months and having the funding to support their students, do their own recruiting, hiring, and supervision. It would be very difficult to accomplish much of the work needing to be done in the busy summer months without summer student help.

Some of our student employees come to NWREC through internship programs, too. These positions usually include an expectation for more independent study or research and/or the completion of a special project during their summer work experience.

At NWREC, we pride ourselves in providing agricultural work experiences for young people and our faculty take the needed time to help the students grow and develop.

We have another great group of summer students, again, this year at NWREC. Twenty-nine students from around the state and country began arriving in late April and May. A number of them will stay through the middle of September. Four of our summer workers are local high school students; the remainder are college and university students. One half of the group this year are returnees—having worked at least one previous summer at NWREC.

2019 NWREC SUMMER STUDENTS
(*returning student)
Small Farms
Reuben Garnett, OSU
Harrison Gingerich, Goshen College
Berry Extension
Megan Eno, Cornell University
Joshua Weston, OSU
Nursery and Greenhouse
Jessica Callen, Biola University
Luke Van Lehman (Intern), OSU
Jennifer Lane (Intern), Willamette Univ.
Phillip Nguyen, OSU

Vegetable & Specialty Seed Crops
Amanda Stephens, Utah State University*

Farm Crew
Jaden Stewart, Canby High School*
Kate Peters, Canby High School*
Sierra Burnell, Canby High School*

Orchard Crops
Tatum Keyes, Portland CC*
Kara Guttridge, Central Oregon CC*
Nate Edmonds, Chemeketa CC*
Erica Rudolf, Portland State University*
Aleksandar Bosarik, OSU

Berry Research
Ashley Ambrose, Linfield College
Mitch Doubra, North Marion High School
Annika Pounds, OSU*
Matt Robinson, OSU*
Kaylee Shearer, George Fox University*
Sophia Rutz, Linfield College*
Sara Estrada, OSU*

Berry Initiative/Olive Projects
Abby Whitney, OSU
Briauna Renne, OSU
Tessa Barker, OSU*
Cora Bobo-Shisler, OSU
Ken Poblador, OSU
Joussy Anahi Hidrobo, OSU*

Lentil and Alfalfa
Nate Edmonds, Chemeketa CC*

Big Summer Student Team Again

NWREC Harvest Dinner—next big event

The summer is starting to wind down. Days are getting shorter. Autumn is approaching. And, it must be time for the annual Harvest Dinner at the North Willamette Research and Extension Center. The event will be Friday, September 20.

This year’s dinner will welcome new College of Agricultural Sciences Dean, Alan Sams. Alan began his new role at Oregon State University this past November 1st. We want to be sure to extend a warm welcome and introduce Alan to as many in our agriculture and farming community as possible. Alan has been to NWREC several times since his arrival at OSU including the most recent launching of the Global Hemp Innovation Center in June. He is looking forward to meeting many of you and sharing his vision for the future of the College’s programs.

We already have a great group of agri-businesses, agencies, and organizations who have already stepped forward to sponsor tables at this year’s Harvest Dinner. Their contributions fund this invitation-only event. We still have room for more sponsors, too. Please consider joining us. Contact NWREC Director Mike Bondi for more information.

The NWREC Harvest Dinner is our showcase of OSU highlights in agricultural research and education in the community over the past year. We select produce from our research trials at NWREC—and combine with other OSU food-related products and innovations—to build a truly unique farm-to-plate dinner. We look forward to sharing our stories and busy year with our many guests as we look ahead to the future with our new Dean.

2019 Harvest Dinner Sponsors—come join the party!

- Oregon Hazelnut Commission, Oregon Hazelnut Marketing Board, Nut Growers Society
- Marion Ag Services
- Northwest Farm Credit Services
- OSU College of Agricultural Sciences
- Clackamas County Extension and 4-H Service District
- Polk County Extension and 4-H Service District
- AgriCare
- Oregon Dairy and Nutrition Council
- Northwest Transplants
- Marion County Extension and 4-H Service District
- Yamhill County Extension and 4-H Service District
- Wilbur Ellis Company
- Simplot Partners
- J Frank Schmidt and Son Nursery
- Oregon Strawberry Commission
- La Creole Orchard
- Clackamas Soil and Water Conservation District
- OSU Extension Administration
- Washington County Board of Commissioners
Special funding was directed to the North Willamette Research and Extension Center during the 2017-2019 Oregon Legislature to initiate applied research and outreach to strawberry and caneberry growers in the region. The funding ($125,000) has been used to support the work of Javier Fernandez Salvador, an Extension Small Farms faculty member in Marion and Polk Counties, to look at developing a year-around fresh market strawberry industry in the area plus develop a needs assessment among caneberry growers to direct research and education programs.

State Representative Rick Lewis, Silverton, was instrumental in obtaining the Legislative funding two years ago with the hopes of seeing a full-time position for this research and Extension work in future university budget requests. With new funding for positions in Extension and the Ag Experiment Station not coming out of this session, Representative Lewis—plus Representatives Christine Drazan, Canby, and Shelly Boshart Davis, Albany—joined together to support funding to extend the Berry Initiative work at NWREC during the recently concluded Legislative session for 2019-2021.

As a result, another $125,000 will be directed to the Berry Initiative under the leadership of Fernandez Salvador through June 30, 2021.

“This funding is huge,” said Fernandez Salvador. “I believe we have made very good progress getting the year-around production of strawberries project up and going. Currently, we have production data from parts of two different years. This new funding will allow us to refine our practices and be able to quantify data over two full growing seasons.”

In addition, Fernandez Salvador has been busy securing additional grant, contract and donations to help support his research and education. “We have to start with very talented faculty to build programs,” said Mike Bondi, NWREC Director. “And, it doesn’t happen overnight. But, once we have the people, then they can begin finding additional resources to grow, expand, and sustain these programs.”

We specially thank Representatives Lewis, Drazan, and Boshart Davis for the vision to sustain the Berry Initiative as we continue build to the future.
Past *Down on the Farm* newsletters have talked about infrastructure needs at the North Willamette Research and Extension Center. Not unlike many of the off-campus agricultural research centers around the state, adequate space and facilities for faculty and staff to do their work can be limiting—especially as we have had the chance to grow programs over the past half dozen years since the recession. Also, older facilities seem to need more and more upkeep and maintenance. Upgrades and renovations haven’t typically been a part of any state budgets and only done on an emergency basis.

However, we have seen significant upgrades, repairs, replacements and additions to our facilities and infrastructure at NWREC over the past few years and thanks to a variety of funding sources. Listed here are a few projects you may have seen or some you may not be aware that have occurred in recent months and past year or so. Also, highlighted are a couple of ideas in the planning stages.

- Replaced front entry gate on Miley Road; police chase with neighbor resulted in car going through what was a locked gate last winter.
- Dirty Lab trailer acquired on federal surplus and sited for staff shared use cleaning and/or processing plant samples, washing roots, etc.
- A dozen federal surplus vehicles (cars, trucks, UTVs—plus other rolling stock) acquired for faculty programs and general farm use during the past year.
- Construction of new 2,000 square foot Seed Crops field research and storage building with funding provided by Crop and Soil Science Department.
- Drain line and gravel will be going into the bottoms of the Pot-N-Pot trenches prior to setting pots that will be used for larger shade tree research projects under the direction of Lloyd Nackley.
- Federal surplus solar powered electronic sign board is now available to advertise our major educational programs and events at NWREC.
- Upgrades and renovations to greenhouses, hoop houses, potting shed, run off pad and development of a pot-n-pot research area under the direction and funding of Nursery and Greenhouse program at NWREC.
- New landscaping in patio area adjacent to Downstairs Meeting Room.
- New 12 open-bay equipment storage building for dedicated program use and funded by faculty based on their needs. Excavation for building site underway.

In addition, the Oregon Legislature earmarked nearly $2 million of funding for infrastructure upgrades to existing facilities at OSU’s off-campus locations. The funding requests for proposals were due in early August. NWREC submitted two requests—one for a well upgrade project and the other proposal for the development of additional laboratory space.
NWREC Summer Photo Album

Small Farms School Tractor training

Summer Vegetable Variety Trials

Blueberry Field Day

Open House

Sen. Merkley Hemp Visitor, too

Dieticians Learning How Quinoa Grows
Become a Friend of NWREC Today!

Membership—Friends of North Willamette Research and Extension Center

Name: ____________________________
Address: __________________________ City, State, Zip: __________________________
Phone(s): __________________________ Email(s): __________________________

☐ I prefer to remain anonymous. Please do not publish my name in future publications.

Membership Category (circle one):

- $25 Member
- $100 Second Crop
- $500 Director’s Club
- $2,500 President’s Club
- $50 First Crop
- $250 Bumper Crop
- $1,000 Dean’s Club
- $5,000 Sustainable Agriculture Club

Make checks payable to: OSU Foundation–NWREC. Mail to:
North Willamette Research and Extension Center, 15210 NE Miley Road, Aurora, OR 97002

Membership forms for the Friends of North Willamette Research and Extension Center are also available by contacting the NWREC office at 503-678-1264 or downloading from the website at http://oregonstate.edu/dept/NWREC.

Contact Director, Mike Bondi, for more information or to discuss life or deferred gifts options.
Phone: 503-678-1264 • E-mail: michael.bondi@oregonstate.edu
Cell. 503-705-2434