

# a new normal

Research, teaching and outreach continues during the COVID-19 crisis

By Chris Branam

When Oregon State University closed its buildings statewide in mid-March to help limit the spread of the COVID-19 virus, Dave Stone faced a big decision.

OSU's Food Innovation Center in Portland, which Stone directs, had begun the process of producing medical syrups for an Oregon Health and Science University clinical trial targeting a rare and often fatal metabolic disease. The trial requires that the syrup is produced, bottled and dosed each week. They had to keep the supply going.

Stone, with Audrey Robinson, the center's outreach program coordinator, adapted workflow and processing steps to ensure timely delivery. Stone designated the research as a critical OSU service so that he and Robinson could enter the closed building. They then tested the syrup's shelf-life to determine if they could make larger batches, requiring less travel to and from work. They found out they could.

To accommodate social distancing, Stone and Robinson had reduced the time they spent together to only the final bottling step. There was a problem, however. Prior steps in the process required verification by a second person. They came up with a system to take pictures of the equipment readings with their smartphones and send them to each other. Finally, when they were together, they wore N95 respirators in addition to personal protective equipment they would wear normally.

"We did all of it without compromising the quality or safety of the medical syrup," Stone says.

Stone's is just one example of the adaptations made by faculty and staff in the College of Agricultural Sciences to keep working, teaching and conducting outreach as buildings closed to physical visitors and classroom teaching moved to remote instruction.



Dave Stone and Audrey Robinson follow COVID-19 safety measures to continue producing a critical medical syrup for a clinical trial at OHSU.



## Meeting virtually

Sergio Arispe, an assistant professor and Extension livestock and range-land field faculty in Malheur County, was preparing to give four lectures at a regional cattle producers' school in March but on March 14, OSU restricted travel and face-to-face gatherings for its faculty. Although the regional cattle artificial insemination school was held as scheduled in Marsing, Idaho, Arispe had to cancel his trip.

But he gave his lectures anyway. Via Zoom.

"The cattle producers were already there, having traveled from all over Oregon, Idaho and Nevada," Arispe said. "I had to find a way to meet with them."

"Although I'd used videoconferencing services before, I wasn't very experienced with Zoom," Arispe said. "On a scale of one to 10, I was about a four with Zoom. To get more comfortable with it, I spent about three hours taking tutorials and practicing. There were certain nuances about Zoom that I wasn't familiar with, but after watching the tutorials, I felt very confident. When the conference started, I was able to give my four presentations without a hitch."

Gordon Jones, an assistant professor of practice and Extension agriculture faculty in Jackson and Josephine counties, spent most of the winter planning to host a series of in-person forums for local hemp growers at the Southern Oregon Research and Extension Center in Central Point. Jackson County leads the state in the number of hemp-growing operations by a significant margin. Josephine County comes in second.

Instead of canceling the forum, Jones delivered it as a Zoom meeting. It was the first time he had presented via Zoom to a large group.

"I knew it was possible and that the information would still be useful for growers even if we couldn't meet in person," Jones says. "I was a little nervous beforehand because hemp growers are relatively new clientele for

OSU Extension, and because I hadn't hosted a multi-presenter online program."

The event drew nearly 40 attendees, including other presenters. The audience seemed engaged and didn't report any major issues, Jones says.

Kathleen O'Malley, an associate professor and state fisheries geneticist at the Coastal Oregon Marine Experiment Station in Newport, presented the results of an OSU genetic study on albacore tuna to the American Fishermen's Research Foundation board and director of NOAA's Southwest Fisheries Center.

"It's challenging to present to a group that you can't see," says O'Malley, who used the GoToMeeting platform. "But the group was very engaged and asked a lot of questions from the start."

## Video field tours

Each spring, the faculty at the Columbia Basin Agricultural Research Center (CBARC) outside Pendleton conduct in-person field tours to provide research updates and results.

In April, they turned to video to reach their audiences.

Judit Barroso, an assistant professor and weed scientist at CBARC, recorded a video to share the latest results of a weed map project with her colleagues at the U.S. Department of Agriculture's Agricultural Research Service.

Christina Hagerty, an assistant professor and dryland cereal pathologist, recorded a video about wheat soil-borne mosaic disease—which can cause severe stunting and yellow-pale green mosaic patterns in susceptible wheat, barley and rye cultivars that are planted in the fall.

"I didn't prepare a script because I've been working with wheat soil-borne mosaic virus for several years



Lynn Ketchum photo

Above: OSU fish geneticist and Dungeness crab researcher Kathleen O'Malley holding an adult Dungeness crab at the Hatfield Marine Science Center in Newport, Oregon.

Below: Judit Barroso, weed specialist at OSU's Columbia Basin Agricultural Research Center at Pendleton, removing Russian thistles (tumbleweeds) from a research plot. Barroso is researching ways to control the weed in wheat fields.



Lynn Ketchum photo

and it is second nature for me to talk about it,” Hagerty says. “It was a fun experience and the pandemic has given OSU Extension an opportunity to deliver information in a new way to our producers. I plan to continue to make videos, even after COVID-19.”

A couple hundred miles to the west, Heidi Noordijk, a coordinator with the OSU Extension Small Farms Program, recorded herself harvesting the purple

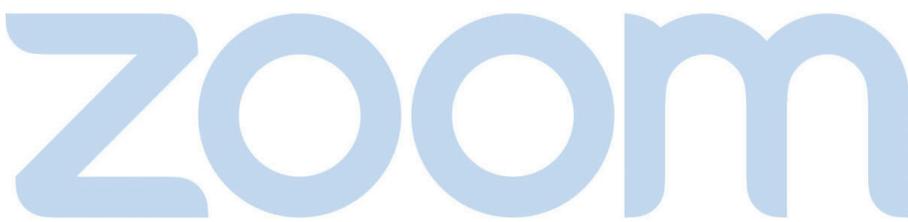
## Staying connected

In early April, as students began attending classes remotely, Kelly Donegan, a senior instructor and head advisor in the Department of Horticulture, started sending a weekly e-mail to the department’s student advising listserv with photos of plants blooming in her yard, or out in nature, along with a nature-based poem.

“To lift their spirits,” says Donegan.

Some faculty came up with ways outside of e-mail to connect with their students.

Susanne Brander and Will White used Slack, a communication tool that acts sort of like a “chat room” for a group or organization. Brander is an assistant professor in the Department of Environmental and Molecular Toxicology, with an adjunct appointment in the Department of Fisheries and Wildlife. White is an assistant professor in the Department of Fisheries and Wildlife.




sprouting broccoli plot at the North Willamette Research and Extension Center in Aurora. The 4 ½-minute video was uploaded to both YouTube and Instagram, where it has been viewed more than 1,200 times.

The broccoli featured in the video is one of the winter vegetables grown at NWREC, a feature of the “Eat Winter Vegetables” effort promoted by the Culinary Breeding Network. The network connects plant breeders, seed growers, fresh market farmers, chefs and produce buyers who are interested in developing varieties and traits of culinary excellence for vegetable crops in the Pacific Northwest.

“We had a winter vegetable variety field day in February at NWREC, and we were thinking of ways to continue connecting with our farmers and chefs,” Noordijk says. “We thought, ‘Why don’t we bring the field to them?’ This is something we can keep doing beyond the pandemic.”





### On April 5, she wrote:

*Dear HORT students,  
Here are some photos of wildflowers that are now blooming, for you to enjoy - pink Calypso Orchid, yellow Skunk Cabbage, white Trillium, pink Anemone, and yellow Wood Violets.*

*For those of you still in Corvallis, you can find these wildflowers and more on the Mulkey Ridge trail that is part of Bald Hill Park, close to campus.*

*Getting out in nature right now is a great way to reduce stress and find comfort. At the bottom of this e-mail, I’ve pasted a poem from one of my favorite Natural History writers, Wendell Berry, that I hope you enjoy.*

*Wishing you all peace of mind, Kelly*

“It’s a way to have a virtual conversation that doesn’t involve 500 more e-mails, and you can use it as an app on your phone or computer,” explains Brander. “We are trying to keep graduate students motivated by also sharing personal stories of coping during the shutdown. For example, my lab tech shared with the group that her coffee maker broke, so another grad student sent her tips on how to make cold brew, and that was shared with the whole group.”

It was as if they were having an informal morning conversation like they normally would when they were in the lab, Brander says. 📍

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Jim Sloan contributed to this story.