



Asotin County

WASHINGTON STATE UNIVERSITY
EXTENSION

Newsletter

Jan-Mar 2020

Welcome to the WSU Asotin County Extension Newsletter!

This is a quarterly newsletter highlighting events and topics of interest to residents of Asotin County and the surrounding areas.

Do you have an event or subject you would like added to our newsletter or website?
Would you like to be removed from our Extension Newsletter email list?

Contact the Extension Office

Phone: (509) 243-2009 Email: jreed@co.asotin.wa.us.

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Contact Us

Office location: 135 2nd St, B107 in Asotin
(Basement of the Asotin County Courthouse)

Hours: Mon-Fri 8:00 to 4:00 (closed 12:00 to 1:00)

Mailing address: PO Box 9, Asotin, WA 99402

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Washington State University helps people develop leadership skills and use research based knowledge to improve their economic status and quality of life.

Extension programs and employment are available to all without discrimination. Evidence of noncompliance may be reported through your local Extension Office.

4-H News/Events and Youth Opportunities

Important 4-H Dates

January

17—Horse certificates due to Extension Office.

24—Beef and Dairy breeding certificates due to Extension Office

25—**Mandatory** 1st swine weigh-in. 8-11 am at Asotin County Fairgrounds

February

22—**Mandatory** 1st sheep and goat weigh-in. 8-9 am at Asotin County Fairgrounds

24—Swine, Sheep, & Goat Breeding Certificates due to Extension Office

4-H information can be found on our webpage:

https://extension.wsu.edu/asotin/4h-youth-development/4h_information_page/

Demonstration Day is Saturday, February 1st, 2020

What is a demonstration?

A demonstration is a presentation given by you, which teaches others how to do something by showing while telling. For example, you may choose to do a demonstration on how to properly groom a dog. A demonstration shows how to do something from start to finish, right in front of your audience so you may show them the end product.

Am I required to give a demonstration at the Asotin County 4-H Demonstration Day?

4-H members are expected, but not required to give a demonstration. We highly encourage youth to participate in this very worthwhile event. Speaking skills are very useful in our day to day lives. Whether we are giving a presentation in school, a social event, or job interview, how we communicate to others is very crucial to our success in the things we do.

How do I create a demonstration?

First of all contact your local 4-H Extension office to find informative publications that explain how to build the perfect demonstration. If you cannot come up with a topic to demonstrate on, the Extension Office has some great handouts that give hundreds of topics to choose from. Your club leader is also a great person to ask for help.

Demo Day Registration forms are due to the Asotin County Extension Office by January 15th, 2020

WSU Asotin County Extension

Physical address: 135 2nd St, Room B107 Mailing address: PO Box 9, Asotin

509-243-2009 / kim.belanger@wsu.edu



Reasonable accommodations will be made for persons with disabilities and special needs who contact Asotin County 4-H at least two weeks prior to the event.

PO Box 9 Asotin, WA 99402 / kim.belanger@wsu.edu

Scholarship Opportunities

Get Ready for Washington State 4-H Scholarship Application

The Washington State 4-H Scholarship Applications will be available for completion on January 1, 2020. If you are a senior 4-H'er, now is the time to start collecting your supplemental documentation!



More information and instructions for applying can be found here:

<https://extension.wsu.edu/4h/youth/scholarship-opportunities/>

Local Agricultural Organization Scholarships



The **Asotin County Wheat Growers, Cattlemen, and CattleWomen** are offering scholarships to seniors from **either** Asotin or Clarkston High Schools. Graduates of CHS or AHS who are 1st year college students may also apply.

Information will be available by Feb 1, 2020. Check our website:

<https://extension.wsu.edu/asotin/4h-youth-development/4-h-youth-families/asotin-county-youth-college-scholarships/>

Contact Mark Heitstuman at the Extension Office: 509-243-2009 or email at heitstuman@wsu.edu if you have

2020 Youth Livestock Field Days

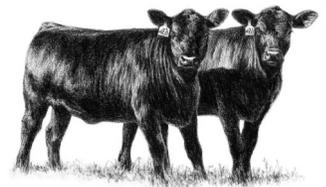
Hosted by the WSU and UI Extension Offices.

These are one-day workshops that teach 4-H and FFA members about raising market projects

Youth Beef Field Day

Saturday, March 14th from 8:30 am to 3:00 pm at the Lewiston Livestock Market

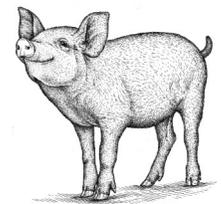
Topics will include: Vaccinations and Health Care, Beef Taste-testing panel, Feeding and Nutrition, Livestock Judging, and Fitting and Showing Techniques.



Youth Swine Field Day

Saturday, March 21st from 8:30 am to 3:00 pm at the Asotin County Fair Grounds

Topics will include: Selecting your pig, Swine Nutrition, Vaccinations and Health Care, Low Stress Handling, and Fitting and Showing Techniques.



Registration will be available soon

Check the Calendar of Events on the Asotin County Extension Website for details and registration

<http://extension.wsu.edu/asotin/upcoming-events-and-workshops/>

The number of participants is capped so please register early.

Master Gardeners and Gardening

WSU Master Gardeners educate local community members in the application of horticultural science to the sustainable management of landscapes and gardens.

The Master Gardeners had an extremely productive year assisting the public. Here are some highlights from the 2019 Asotin and Garfield County Master Gardener Annual report:

In 2019, 27 Asotin and Garfield County Master Gardener volunteers contacted **2956 residents** and donated **2048** total hours to the service and assistance of over 24,857 residents in the two counties; valued at **\$64,978.42** (Independent Sector = \$31.72/hour in the State of Washington).



Master Gardener Volunteers in Asotin and Garfield Counties staffed a total of **33 office plant diagnostic clinics** from May – September; **volunteering over 408.5 hours**. They assisted **158 community members** with a wide variety of horticulture questions and plant problems. Master Gardeners diagnosed plant problems, identified insects and plants, and answered questions using research-based horticulture and science-based gardening practices.

Master Gardener Volunteers in Asotin and Garfield Counties actively engaged in community outreach; hosting and teaching **27 information clinics and events throughout the growing season, reaching 780 residents and volunteering 285 hours to the communities**. Master Gardeners disseminated horticulture information to the general public, answered questions, demonstrated proper techniques and gardening practices, and shared information on local gardening topics. **52% of the contacts were related to landscape plants, vegetable gardening, and pollinators**.



Youth outreach and formal school garden and nutrition programs were core to the Master Gardener Programs, making a **total of 2023 youth contacts** in Asotin and Garfield counties.

Master Gardener Volunteers partnered with school educators to deliver gardening programs to community youth, spending **65 days (95 hours)** in the classroom and at youth events.



Asotin County Master Gardeners also participated with the Asotin County Extension Youth Activity Camp; teaching 15 youth about plants, vegetables, bugs, and bees over a 5-day period. Other youth outreach events included Arbor Day Tree Planting at Highland Elementary (4th graders), reaching 10 youth; and the Pumpkin Patch harvest festival with Highland Elementary (Kindergarten and 1st Graders), reaching 169 total youth.



Become a Master Gardener Volunteer!!

Asotin, Garfield, Whitman, and Nez Perce Counties

Training Classes begin February 4, 2020

contact our office: 509-243-2009 / janice.reed@wsu.edu

Information and applications can be found at:

<https://extension.wsu.edu/asotin/gardening/horticulture-classes-and-workshops/>

- ◆ Classes will be every Tuesday Feb 4 – April 14, from 1:00 to 4:30 at the Clarkston Campus of Walla Walla Community College.
- ◆ Class recordings will be available
- ◆ The Horticulture Training classes are also offered to those who want to take classes for their own personal benefit and do not plan to become Master Gardeners.

There will be an **informational session on January 28 from 1:00 to 3:00** at the Clarkston Campus of Walla Walla Community College. We will discuss in detail the Master Gardener programs in Asotin, Nez Perce, Whitman and Garfield Counties. Admission into the local Master Gardener Programs is on an application basis and not all applicants are guaranteed acceptance into the program.

Applications will be accepted until Friday, January 31, 2020.

Please return completed applications to:

WSU Asotin County Extension Office:

Mail to: PO Box 9, Asotin, WA 99402

Deliver to Asotin County Courthouse basement, 135 2nd St in Asotin



What Do Asotin County Master Gardeners Do?

- ◆ They serve the community and enjoy the camaraderie of great people who love gardening, learning, and serving.
- ◆ Assist the public diagnosing their plant problems in plant clinics.
- ◆ Develop and present fun and stimulating plant and gardening related educational programs to school children in Asotin County.
- ◆ Participate in the design, development, and maintenance of the Demonstration Garden at the Clarkston Community Garden.
- ◆ Conduct classes and workshops for the general public about a wide variety of horticulture topics.
- ◆ Participate in continuing education to further develop personal gardening knowledge and skills.
- ◆ Staff Master Gardener information booths at the Asotin County Fair, Farmer's Market, and other community events.

Banana Belt Gardening Series

Brought to you by UI and WSU Extension

Thursdays, in March. 6:00 p.m. – 8:00 p.m.

Location to be determined.

Cost: \$7.00 per class

March 5 — Pruning Fruit Trees

March 12 — Starting Tomato Plants

March 19 — Learning of Long Lost Apple Varieties

March 26 — Problem Solving Lawns

University of Idaho
Extension

Nez Perce County

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Contact the Nez Perce County Extension Office for more details or to enroll: 208-799-3096

Get a leg up on fruit tree problems with dormant oils

<https://extension.oregonstate.edu/news/get-leg-fruit-tree-problems-dormant-oils>

CORVALLIS, Ore. – Just when you're ready for a long winter's nap, it's time to tend your fruit trees.

If you don't, chances are they'll struggle in the coming season. Giving them attention now helps ward off insects and diseases, said Steve Renquist, a horticulturist for Oregon State University Extension Service who has taught hundreds of gardeners the basics of managing fruit trees.

Applying dormant sprays – Superior oil, copper, and sulfur – helps control nasty pests and diseases like codling moths and apple scab. Superior oil, also called horticultural oil, is a highly refined miscible oil (up to 99.9 percent pure) that when mixed with water and sprayed on trees will smother overwintering insects and their eggs. It targets mites, aphids, leaf hoppers, mealy bugs, leaf miners and more.



Lime sulfur is a fungicide that controls fungal diseases like apple and pear scab and peach leaf curl. Copper is a fungicide and bactericide that controls diseases like bacterial blight, fire blight and Nectria canker. It kills bacteria and fungal spores left in the trees, including *Pseudomonas syringae*, a common bacteria that can cause gummosis, which is oozing of bacterial infested honey-like sap from bark split. In a rotation of copper and sulfur, the copper will deal with bacteria and sulfur will target fungal diseases best.

Get a leg up on fruit tree problems with dormant oils (Continued)

With a spray regimen of all three – used in conjunction with good hygiene and pruning practices – most fruit tree problems can be nipped in the bud, according to Renquist. The trio of pesticides, which can be used in organic gardens, fit snugly into the realm of IPM or integrated pest management, a practice that uses a variety of low-risk tools to deal with pest problems and minimize risks to humans, animals and the environment. “They are a really important part of good IPM,” Renquist said. “When you’re planning a program, you want to use products that have low toxicity, and won’t cause a lot of problems for the environment. Dormant sprays score pretty well. Their toxicity level for animals is pretty low if you follow the labels. Superior or horticultural oil kills target insects, but beneficial insects are rarely around trees in the dormant season

A good reference for disease and pest control is Extension’s [Managing Diseases and Insects in Home Orchards](#), which has a list of cultural practices and least toxic products for various pests and diseases.

(https://catalog.extension.oregonstate.edu/sites/catalog/files/project/pdf/ec631_0.pdf)

For information on specific products contact your local Master Gardeners.

Renquist recommends a three-pronged approach to spraying. In fall around Thanksgiving, apply copper or sulfur but not both. Spray sulfur mixed with Superior or horticultural oil in early January. Then use copper or sulfur in mid-to late February. If you used copper in fall, use sulfur in February or vice versa. Don’t combine copper and sulfur in the same tank to minimize the risk of damage to tree bark.

If you don’t like to spray or forget the early spray, Renquist said the January application is the most important. This year, if you’ve missed the January timing, you’re still better off to make the third spray.

Some tips from Renquist:

- Apply Superior or horticultural during the dormant season to allow for greater coverage and a higher likelihood of getting to a majority of insects.
- Spray when temperatures are above freezing but before buds break.
- Don’t mix copper and sulfur in the same tank.
- Prune trees to keep the branches separated for good pesticide coverage and good hygiene. The best time is in January so that the last spray or two will cover the pruning wounds.
- Clean up fruit, leaves and debris under trees. They can harbor insects and diseases. If you don’t want to rake leaves, mow over them a couple of times and leave them to decompose.
- Clear weeds from around the trunk and under the tree where insects and rodents can hide.
- Add organic matter around trees for fertility and because enhanced microbial populations in the soil will help devour the remnants of orchard sprays that fall to the ground.
- Accept a little damage to fruit.
- When planting fruit trees, consider dwarfs so you don’t need a ladder for spraying.
- Read the labels of all products you use and follow the instructions. Using any pesticide incorrectly is not only harmful to you and the environment, it can actually cause damage to the very plants you’re trying to benefit.

More information on fruit trees:

[Training and Pruning Your Home Orchard](#) (<https://catalog.extension.oregonstate.edu/pnw400>)

Backyard tree fruit spray schedule: <http://treefruit.wsu.edu/backyard-fruit-tree-spray-schedules/>



The Buzz



Interested in becoming a beekeeper?

The Valley Beekeepers Association will have their beekeepers class beginning in 2020 if there is enough interest. The classes will cover information on the housing, care, and feeding of bees. They will be followed through the summer by field days, as needed, to demonstrate such things as putting a bee "package" into an empty hive and checking the health of a hive. The intent is to get new beekeepers through their first year. Experienced beekeepers also are welcome to participate.



**Please contact John Freeman if you are interested in taking the beekeeping class:
509-758-6338**

Pest Alert: Asian giant hornet

Thursday, December 19, 2019

Chris McGann, Communications

This month, WSDA entomologists identified a large hornet found near the Canadian border as an Asian giant hornet (*Vespa mandarinia*), an invasive species not previously found in Washington State. Although it is not typically aggressive toward humans, this unwelcome pest can inflict a powerful sting and also represents a threat to honeybees, for which they have a voracious appetite.

On Dec. 8, a resident in Blaine near the Canadian border reported an unusually large hornet they found on their property. Two days later, WSDA visited the site, collected the specimen, which was dead, and confirmed its identity a short time later. The resident also reported seeing a live giant hornet at a humming bird feeder before it retreated into a nearby forest.

WSDA and Washington State Department of Health (DOH) officials ask people in the area to be on the lookout for and take precautions to avoid contact with these large bugs. The invasive hornets are typically almost an inch and a half long and are distinguished by their large yellow heads. Asian giant hornets nest in the ground. Though they are typically not interested in humans, pets or large animals, they can inflict a nasty sting if threatened or their nest is disturbed.

Asian giant hornets are typically dormant over the winter, and are most often seen from July through October.



Adults can be nearly two inches long, have a distinctly light-orange head with prominent black eyes, a black thorax and a black/yellow striped abdomen.

Pest Alert: Asian Giant Hornet (continued)

Health advice

DOH advises individuals to take preventative measures in the outdoors by keeping food and drink covered or under screens, and cleaning up by disposing food and garbage properly. People should avoid swatting at the hornets, which may cause these insects to sting.

If you are stung, DOH recommends washing the site thoroughly with soap and water and applying ice or a cold compress to reduce swelling. The agency also recommends an antihistamine or use of an anti-itch cream to reduce itching if necessary. If you are stung multiple times or have symptoms of a severe reaction following a sting, call 911 or seek medical care immediately.

Additional information about bee and wasp stings and prevention measures can be found on the DOH website: <https://www.doh.wa.gov/CommunityandEnvironment/Pests/BeesandWasps>

A threat to bees

Asian giant hornets feed on insects and are of particular concern to beekeepers because they are capable of quickly destroying honeybee hives.

This is the first time this invasive species has been detected in Washington State. In August, a large colony of Asian giant hornets was discovered and subsequently destroyed in British Columbia. The BC Ministry of Agriculture issued a pest alert about the detection in September.



Asian hornet (*Vespa mandarina*) eating a honeybee. These giant wasps can cause considerable damage to honey bee colonies.

SCOTT CAMAZINE/SCIENCE PHOTO LIBRARY



Giant Asian hornet. Size comparison to a honeybee.

Responding to the Asian giant hornet

In 2020, WSDA will conduct outreach to generate public assistance in looking out for the Asian giant hornet and reporting any detections to the WSDA Pest Program. Additionally, WSDA is preparing plans to set traps in the Blaine area to monitor for Asian giant hornets.

If you think you may have spotted an Asian giant hornet, report it to WSDA's pest program (pestprogram@agr.wa.gov) and, if possible, include a photo.

Agriculture and Natural Resources

Northwest Agriculture - Adapting to Climate Change

<https://www.climatehubs.usda.gov/hubs/northwest/topic/northwest-agriculture-adapting-climate-change>

Producers, landowners, and land managers in the Northwestern U.S. are facing the challenges of increased variability and severity of weather events due to a changing climate and are altering their management decisions as a result. We can understand climate as a long-term average over decades to centuries, whereas weather refers to changing conditions of the atmosphere over shorter periods of time from minutes to months.



In the Northwest, winter snowpack is essential for meeting irrigation needs during the growing season. Warmer winters and springs can result in reduced snowmelt and more rain than snow in the mountains, reducing water flow during the peak growing season when irrigation, municipal and wildlife demands are at their highest. Since the 1980s, the region has experienced higher average temperatures and in certain years a reduced snowpack. These trends are expected to continue, with consequences in both rain fed and irrigated agricultural sectors. Higher temperatures and changes to precipitation can also lead to longer periods of drought, floods, more heat stress to crops, and livestock, and changes to pests and disease dynamics; these changes will impact agricultural productivity in both positive and negative ways.

The long-term climate projection for the Northwest is for warmer temperatures and increasing inter-annual variability in both rainfall and temperature. More precipitation will fall in the winter and less precipitation in summer. With warmer temperatures winter precipitation will be in for the form of rain rather than snow. Also longer dry-periods between precipitation events is predicted. Regional climate predictions are important as they can enable producers and land managers to plan for the future in order to adapt management practices to maintain sustainable, productive landscapes in the face of a changing climate.

Maintaining sustainable and productive agricultural production systems and natural ecosystems in the face of an increasingly variable and changing climate requires that producers and land managers have the information they need to plan and to continue to adjust management to ensure sustainable productive landscapes. View [adaptive resources](#) suggested by the Northwest Climate Hub and [tools](#). Adapting agriculture to a changing climate depends on the type of production system that a producer is working within, coupled with an assessment of the vulnerability of that system.

However, there are some strategies throughout the Northwest that producers are implementing to build greater resilience in the face of more extreme and variable weather, these include:

- [New genetics of livestock, stocking with different breeds and changes to pasture management](#)
- [Dry farming](#) in Western Oregon and Washington to respond to reduced water for irrigation or early shutoffs for junior water rights holders
- Focus on [soil health](#) and erosion prevention
- Changes to [irrigation efficiency](#)
- [Diversifying cropping systems](#)
- New varieties (e.g., wine grapes/fruit & nut trees)
- Find [additional resources](#) to aid with adaptation to climate change on agricultural lands and decision support tools: <https://www.climatehubs.usda.gov/agricultural-adaptation-changing-climate>

Healthy Living

RESOLVE TO REPLACE DIETS WITH GOOD HEALTH HABITS

Adapted from Linda Rellergert, University of Missouri Extension

This is the time of year when many people start diets. But after a few weeks of not getting enough to eat or eating food that does not taste good, most dieters give up, having "failed" once again. The truth is, though, it is the diets that are the failures, not the people who try them.

Instead of improving health, dieting is often harmful and counterproductive. Health statistics show that only 5 to 10 percent of those who diet and are able to lose weight are able to maintain the weight loss for more than a short time. Most dieters quickly regain the lost pounds - plus a few extra - and end up heavier than they started.



Diets promote unhealthy eating habits, often by eliminating nutritious foods. Dieters are encouraged to ignore internal body signals of hunger and fullness. Eventually, the ability to respond appropriately to these normal physiological processes is lost. Chronically hungry people become obsessed with food and are likely to overeat when an opportunity to do so presents itself.

Accept that there is no ideal body size, shape or weight. People come in a variety of sizes and shapes, and all can benefit from a healthy lifestyle. Research conducted by Steven Blair, director of research at the Cooper Institute for Aerobics Research in Dallas, has shown that people can be both fit and fat. He notes "There will always be tall, skinny people and short, stocky people. That's out of our control. What we can do is exercise regularly, follow good health practices, and live life to the fullest." Each person is responsible for taking care of his or her body. Acceptance and self-respect lead to confidence, wellness and wholeness.

Adopt normal eating patterns. Normal eating means regular meals and one or two snacks a day to satisfy physical hunger. Healthful food choices provide variety, moderation and balanced nutrition. All foods can be part of healthy eating. Respect the body's signals of hunger and fullness by eating when hungry and stopping when satisfied. Normal eating also means eating more some days and less others, and trusting that it will balance out over time. Finally, find non-food ways to cope with stress.

Make physical activity a part of every day. Benefits include reduction in blood cholesterol and lipids, lower blood pressure, and relief from stress. Find activities that are fun and enjoyable, and that fit into daily routines. Walking, sledding, skating, dancing, bowling, gardening, or playing with the kids are excellent ways to get physical. Then you can go on to add other activities like weight training, yoga or Tai Chi that build muscles or improve balance and flexibility.

Get more sleep. Most of us get seven or fewer hours of sleep rather than the eight hours a night recommended by the National Sleep Foundation. This may seem like just a small deficit, but the effects are cumulative. Chronic sleep deprivation contributes to stress and tension, accidents in the home, work place and on the road, and can cause difficulty in coping with the little everyday annoyances of life.

Understanding Immunity to Improve Health

By Marcia Gossard, WSU College of Veterinary Medicine

Dr. Alan Goodman and doctoral student Marena Guzman.

Just a few short hours after illness-causing bacteria enter the human body, a sophisticated defense system goes to work. The immune system quickly recognizes the foreign invaders and sends a well-orchestrated, frontline defense.

“Innate immunity is ancient,” says Alan Goodman, assistant professor in the School of Molecular Biosciences and affiliate faculty in the Paul G. Allen School for Global Animal Health. “Our bodies have many ways of fighting infectious disease, but innate immunity is something that must be important for it to have persisted.”



Goodman and his colleagues found that one of those defenses, a protein called STING or stimulator of interferon genes, is also used by fruit flies, which are evolutionarily 800 million years older than humans. The STING protein signals to circulating blood cells to fight the infection in the body. Because both species use the same innate immune response, scientists can use the model to improve the human immune system and develop new ways to fight infection.

Healthy People and Animals

As a graduate student and postdoctoral fellow, Goodman primarily worked to understand viruses in humans. But once at WSU, he met researchers working on zoonotic diseases that transmitted from animals to people like Q fever, a highly contagious zoonotic disease caused by the bacteria *Coxiella burnetii*. Goats, sheep, and cattle are particularly susceptible to the disease, which can then be transmitted from animals to people. Although it is not usually fatal, Q fever causes flu-like symptoms in people that can continue for years.

“I had never heard of Q fever before I came to the college,” says Goodman. A human disease researcher by training, Goodman is now applying his model with fruit flies to Q fever and undertaking a novel approach to understanding a disease that affects humans and animals. Once they know how the immune system is responding to the foreign invaders, they can use the knowledge to counteract the infection by priming the body’s immune response. “Our research can reduce infection in farm animals and in the human population,” says Goodman.

“One of the main reasons to study Q fever is because if there is an outbreak it can become very problematic,” says Goodman. “It can spread very rapidly, and the symptoms can linger for years. Antibiotics are not very effective against it because the bacteria can live in cells. If we understand the immune mechanisms, we can use that knowledge to reduce potential epidemics and to fight them off if they occur.”

Basic Scientific Research Leads to Breakthroughs

Goodman’s research, which is already helping to better understand how the innate immune system responds to disease, provides the basic science that can one day lead to ways to improve the human immune system and develop infection-fighting medicines.

Before receiving a \$2.4 million federally funded grant from the National Institutes of Health in 2019, Goodman’s lab received intramural research seed money from the WSU College of Veterinary Medicine in 2016 and 2018 totaling \$40,000. According to Goodman, that seed money was key for getting the federal award.

“We would have been much less competitive if we hadn’t received the seed money,” says Goodman. “Seed money allowed us to test preliminary hypotheses and to generate data. The results helped form more experimental models and let us know we were on the right track. And it helped us to do research for two key publications that show the kind of work we can do with fruit flies, *Coxiella burnetii*, and innate immunity.”