Growing into Change, the Cougar Way

Change often accompanies growth. And as CAHNRS has continued to experience change, we have also continued to grow as a college—and as a university. This year, we welcomed WSU’s eleventh president, Kirk Schulz, who’s leading the charge in our “Drive to 25,” a vision for WSU to be recognized as one of our nation’s top 25 public research universities. Entomology professor Richard Zack, who is also our resident expert on insect cuisine, stepped up to serve as interim associate dean of academic programs as we say goodbye to Kim Kidwell, executive associate dean of CAHNRS, and thank her for many years of impactful leadership and professional contributions. And, finally, there are my plans to return to research and the classroom in 2018 after four years of service in upper administration, prompting our search for the next Dean of CAHNRS.

But change and innovation are things we know well and embrace in CAHNRS. In fact, the college provides leadership in multiple dimensions, as you’ll see in this issue of ReConnect. New collaborations and enterprises continue to be a hallmark of our college. Honey bees and beards, landscape architecture and watersheds, stormwater research and outreach, 4-H presence on farms and in courtrooms—these are just a few examples of the many innovative connections and initiatives CAHNRS engaged in this past year. Whether it’s interdisciplinary initiatives within the WSU family or partnerships with national organizations, our college’s dedication to creating opportunities for learning, researching, and benefiting communities is truly exceptional.

I hope you’ll be as inspired as I am by these stories of your fellow Cougs’ successful contributions and growth in our ever-changing landscape.

GO COUGS!

Ron C. Mittelhammer
Dean of CAHNRS
**FIVE GENERATIONS OF COUGS IN ONE FAMILY**

Jim Moore can look back two generations and forward two generations and see Cougar connections in both directions.

“According to my mother, my grandmother started it all by attending Washington Agriculture College in the early 1900s,” said Moore, 78.

His mother graduated from Washington State College in 1934, whereas he started at WSC but graduated from Washington State University with an Agronomy degree in 1960.

Moore and his wife, Ann, who also attended WSU, saw their daughter Candi Moore Roach graduate from WSU in 1987 with a degree in Nursing. Candi Roach’s husband, Arther Roach, is also a Coug, graduating in 1985.

Their daughters and Moore’s granddaughters, Lexi and Mandi Roach, graduated from WSU in 2013 and 2014, respectively, both with degrees in Agricultural Technology and Production Management.

“Being a Coug isn’t about sports, it’s a way of life,” Moore said. “I can’t explain it to anyone who hasn’t experienced it. Once a Coug, always a Coug.”

Moore, a wheat farmer from Kahlotus, Wash., is also a supporter of WSU’s agriculture program.

“We feel that if we’re going to feed the world, technology and management are increasingly important,” he said. “It is the people on the land that will feed the world, and they need the best education to do that. We just want to help them get that education.”

---

The Ste. Michelle Wine Estates
WSU Wine Science Center named its microbiology lab after a giant of the Washington wine industry: Charles “Chas” Nagel.

Nagel worked with other Washington wine pioneers like Walter Clore, George Carter, and Ray Folwell to prove that fine wine could be produced and marketed in Washington.

This past summer, the center hosted an event to celebrate Nagel, who passed away in 2007 at the age of 80.

Nagel’s son, Rob, said he wishes his dad could see the Wine Science Center.

“I think he’d be enamored and proud,” Rob Nagel said. “And I think he’d love to work both in the winery and in the chemistry and microbiology labs.”

Nagel’s first graduate student and eventual colleague, Joe Powers, said Nagel was very active with research and wasn’t inclined to just sit at his desk.

“He wore a lab coat every day because he was in the lab every day,” Powers said. “He just loved to do the science.”

Money raised at the event will go toward the lab named in Nagel’s honor.

Scott James Gundersen has used over 200,000 corks in mosaics he has created.

Read more about the artist at [www.scottjamesgundersen.com](http://www.scottjamesgundersen.com).
Sam Godwin’s a Coug—he earned a bachelor’s degree in engineering at WSU in 1986.

“I came from a small town to what seemed like the giant city of Pullman,” Godwin remembered. “That first day, in my chemistry class, there were more people in the room than there were in my whole high school. It was that first step of learning how big the world is.”

Fifteen years ago, Godwin left behind his engineering job at Boeing to move his family back to the orchards of his tiny hometown of Tonasket, Wash.

“I wanted to give my young family the ability to grow up on a farm, the way I did,” he said.

A second-generation grower of apples, pears, and cherries, Godwin wants to ensure that future generations can make a living from their orchards. With only 200 acres, he’s a small player. But Godwin is helping make an outsized impact through the WSU Tree Fruit Endowment.

As chair of the Tree Fruit Endowment Committee, Godwin champions the effort to bring top research faculty and new technology to Washington’s tree fruit industry, while supporting the research orchards and facilities where trees, tools, and techniques are grown.

The endowment was created by growers, who contribute a small percentage of their annual crop. Now in its third year, the endowment has raised $16 million toward a $32 million goal.

A member of the Washington Tree Fruit Research Commission, Godwin is also chief information officer for Chelan Fresh Marketing, which markets apples, pears, and cherries.

“Sam is future-oriented,” said Jim McFerson, director of the WSU Tree Fruit Research and Extension Center in Wenatchee. “He looks at how we can stay competitive.”

For any business to be successful, investment in research and development is vital, said Godwin.

“As a small farmer, my ability to shine a light with my own research is pretty small,” he said. “By getting farmers to work together through an endowment, suddenly our light becomes very bright. We’re able to attract the best and brightest.”

Working together like this advances the industry, ensuring a future where good, high-tech jobs exist.

“For me, it’s about giving back,” said Godwin. “I want my 10-year-old son, Lucas, to be able to come back to farming and live the life I’ve been able to enjoy,” Godwin said. “This endowment is a way to do that—to create opportunities for the next generation.”

The Creamery plans to keep growing and improving for the benefit of student employees, customers, the university, and the dairy industry alike.

Learn more about the WSU Creamery: http://creamery.wsu.edu.

Learn more about the WSU Tree Fruit Endowment and tree fruit advances at http://treefruit.wsu.edu.
They still raise cows, grow corn, and can tomatoes, but 4-H members also become computer geeks, amateur astronomers, and even future leaders of our country.

Each year, teenage members of the WSU Extension 4-H program participate in “Know Your Government,” or KYG. They learn about the political process not from the pages of books but from inside courtrooms, town hall meetings, and legislative and county hearings.

“It’s a hands-on way of learning about civics and the democratic process,” said Jan Klein, WSU’s 4-H teen leadership specialist. “The knowledge and awareness that young people gain is useful throughout their lives.”

As a 4-H member while attending high school in Friday Harbor, Wash., Clinton Gauthier explored the roles of senate chair, judge, lobbyist, and journalist. He learned public speaking and debate, how bills get passed, and the art of negotiation and compromise, he said.

“The KYG program opened my eyes to the intricacies of the political process and taught me to be a critical thinker, to look deeper at the issues,” he explained.

The experience was so valuable that he went on to become a KYG volunteer adult mentor while studying criminal justice at WSU.

“It meant a lot that I could help young people acquire the kinds of insights and skills that I did,” said Gauthier, who graduated from WSU in May, 2016.

Roughly 220 students participate in KYG each year, hailing from rural and urban counties alike, said Klein, who has overseen Washington’s program for the past decade. Topics and curricula change yearly to keep up with current events and issues, she said, with a range of focuses including the legislative and judicial process, elections and party platforms, and politics and the media.

The program culminates each February with a conference in Olympia, where students participate in mock trials, committee hearings, and non-partisan party conventions. They also meet with legislators, lobbyists, and judges, said Klein.

“Working with their peers, teens see how democracy requires participation and teamwork,” she explained.

WSU Extension operates the state’s 4-H program. Although the nation’s 114-year-old organization remains connected to its agricultural roots, it has evolved to include science, technology, and citizenship. Programs like KYG demonstrate that evolution.

Whether pursued at county fairs or legislative hearings, “our goal is to help these students become responsible, self-confident, and self-motivated citizens,” said Klein.

Hundreds of future students could have a more affordable education thanks to efforts by alumni in the School of Economic Sciences (SES) and the inspiration of one professor.

Just before stepping into his emeritus role last fall, Richard Shumway, SES Regent's professor, set out to create $100,000 in new scholarships for his school. To do so, he reached out to nearly a hundred former students and peers.

“The need for student support cuts across all fields,” he said. “It’s a different world today than when I attended UC Davis with free tuition. Through scholarships, those of us who were able to earn a degree without debt can help current students do the same.”

Scholarships help the SES attract and keep talented undergraduate and graduate students who might not otherwise be able to afford the WSU experience.

“We can help the whole university be more competitive,” said Shumway.

To support SES students, email Shumway at shumway@wsu.edu, or call the CAHNRS Alumni and Development office at (509) 335-2243.

To support SES students, email Shumway at shumway@wsu.edu, or call the CAHNRS Alumni and Development office at (509) 335-2243.

Stay competitive, be debt-free

SES Regent’s professor emeritus Richard Shumway

Jan Klein, 4-H teen leadership specialist
To raise money for an important research facility, getting attention is a big boost. Like, say, having the Provost and Executive Vice President of the university, who had just served as interim President for nearly a year, wear thousands of honey bees on his face and neck.

“It was really noisy, and a little strange having all those legs moving around on your face,” said Dan Bernardo, the man who agreed to wear the bee beard on the WSU campus in June, 2016.

The event, called Bee Like Dan, kicked off the fundraising efforts for a new Honey Bee + Pollinator Research Facility at WSU.

“For someone like Dan, who isn’t used to being around bees, the toughest part is forcing yourself to relax,” said Steve Sheppard, chair of WSU’s Department of Entomology and a honey bee researcher. “It’s like getting a tiny surface massage from thousands of tiny little scratchy things. You can feel them holding onto you and it’s loud, but it’s not bad at all.”

Sheppard said he’s hugely appreciative of Bernardo for helping raise awareness of the bee program and the need for a new facility.

“We’ve been in ‘temporary quarters’ since 2000,” Sheppard said. “We’ve got great equipment, but we’re spread out in three different locations around campus. Just moving between labs takes time and it really limits collaboration between faculty and staff in those different buildings.”

The new facility, which will require $16 million to build, will place everyone and everything in one location: in a field near the Eggert Family Organic Farm, allowing plenty of research hives to be kept nearby.

“We’ll be able to do specialized plantings for pollinator research, which is difficult for us now,” Sheppard said. “We’re consistently looking for good nutrition sources for our bees.”

In addition to labs and specialized equipment, the building will have outreach capabilities, including classrooms and a screened-in view-
An unorthodox solution may save honey bees: REFRIGERATION.

“I think indoor storage will completely change the wintering of bees,” said Brandon Hopkins, WSU entomology research associate and research manager of the WSU Apiary Program. “So far, it has significantly reduced colony losses for beekeepers.”

Currently, most professional beekeepers in the northwest overwinter their colonies in California in what are known as holding yards. But beekeepers have to supply their hives with thousands of gallons of corn syrup, Hopkins said, because temperatures are warm enough for bees to fly, but there is nothing for them to eat.

“It’s really stressful for the bees, to always be active,” Hopkins said. “The colonies constantly rob each other, spread disease, and the queens keep laying eggs year-round.”

In cooler climates, bees basically shut down in the winter months. It’s too cold for them to fly and the queen doesn’t lay any new eggs. They don’t hibernate, but they lower their metabolic rate, simply vibrating their bodies to generate enough heat to keep the hive warm.

But winter months are when bee colonies most often collapse. The nationwide average for colony loss has continued to climb to over 30 percent, with last year’s winter losses averaging 44 percent, Hopkins said.

After Washington beekeeper Eric Olson lost almost 60 percent of his hives in California holding yards, he followed the advice of an Idaho beekeeper and kept all 15,000 or so of his hives up north—and indoors. That year, his colony loss was less than 10 percent, a significant drop from the previous few years in California.

“Eric was using what was basically a giant air-conditioned vault,” Hopkins said. “The bees are in there breathing, and the carbon dioxide level went up. Eric was concerned, so he opened the doors every single night.”

That carbon dioxide concern got the attention of WSU researchers, who thought it might be possible to kill Varroa mites, a major cause of colony collapse, without harming the bees.

Very preliminary research has shown that increasing CO₂ to a level bees can tolerate significantly increases mite mortality rates. This method could lead to a decrease in chemicals and pesticides currently used to fight the mites, Hopkins said.

The goal now for WSU researchers is to find ideal settings for controlled atmosphere facilities. Unfortunately, achieving this goal may have to wait until WSU can build its new Honey Bee + Pollinator Research Facility.

“Eric was using what was basically a giant air-conditioned vault,” Hopkins said. “The bees are in there breathing, and the carbon dioxide level went up. Eric was concerned, so he opened the doors every single night.”

That carbon dioxide concern got the attention of WSU researchers, who thought it might be possible to kill Varroa mites, a major cause of colony collapse, without harming the bees.

Very preliminary research has shown that increasing CO₂ to a level bees can tolerate significantly increases mite mortality rates. This method could lead to a decrease in chemicals and pesticides currently used to fight the mites, Hopkins said.

The goal now for WSU researchers is to find ideal settings for controlled atmosphere facilities. Unfortunately, achieving this goal may have to wait until WSU can build its new Honey Bee + Pollinator Research Facility.

“We just can’t do multiple trials with different settings with our current setup,” Hopkins said. “But the plans for the new facility include everything we should need to get this research dialed in. And hopefully make a huge difference for beekeepers and farmers who depend on bees.”
Paul Stamets has a strong relationship with eastern Washington, having a family farm near St. John. The Stamets family has even donated land to WSU to help agricultural research. But his current relationship with WSU could help agriculture in a very different way: saving bees using fungi.

Stamets (left) is founder and owner of Fungi Perfecti, a company that grows and sells fungal extracts to businesses and consumers. Recently, he made a connection that he hopes will help save honey bees from Varroa mites, a pest that is decimating bee populations around the world by spreading viruses and other diseases.

“We’re working with the NIH (National Institutes of Health) on a program studying the antiviral properties of mycelium in fungi,” Stamets said. “And I realized that we often see bees in the wild using rotted trees as a habitat. If fungi can have antiviral properties for humans, it should work for bees, too.”

Varroa mites reduce bees’ abilities to fight off viruses, according to Steve Sheppard, honey bee researcher and chair of WSU’s Department of Entomology. “Mites amplify the viral impact on bees,” Sheppard said. “So if we can reduce the viral impact, we may reduce the damage done by mites overall.” Preliminary experiments have shown that giving hives a small amount of mycelium extract increases the lifespan of bees in cages and reduces the number of viruses, Sheppard said.

Stamets strongly supports research that accounts for the interconnectedness of ecosystems, where researchers look at the bigger picture rather than focus on one species or issue. “There are support networks that have evolved in nature,” Stamets said. “Fungi offer complex solutions to complex problems. So investing in basic science that looks at the reservoir of solutions nature provides is important.” Stamets has made several donations to WSU and Sheppard’s honey bee program, including $50,000 this summer, which he made while wearing a bee beard at the Bee Like Dan fundraising event. “Wearing the bee beard was a great experience,” Stamets said. “It’s important to demonstrate how we can get along with nature.”

Nature, and doing things naturally, is really important to Stamets. He started Fungi Perfecti not to make money, but to fund research projects on fungus. “Fungi are basic to the food web of our world,” he said. “Much of our soil is dependent on fungi decomposing cellulose and liberating nutrients for other organisms. Without fungi, we are in serious peril.”

The same goes for bees, one of the most important pollinators in the world. Sheppard appreciates Stamets’ dedication to feeding the world and helping honey bees. “We are so fortunate that Paul called,” Sheppard said. “He had the data on reducing viruses in humans and the idea that it could translate to bees. And his support and funding have led to very promising new areas of study that we hadn’t considered before.”
The emails and phone calls come from far and wide, full of questions and updates: Advice on a clutch of earwigs in a former student’s basement. Mystery moths and strange spiders. A wedding announcement for two students who met in class.

Contacts like these are routine for Richard Zack, WSU professor of entomology, thanks to his entry-level science course, Entomology 101: Insects and People.

In it, for the past 17 years, he has sometimes sneakily introduced hundreds of students to a love of science, and bugs, that they don’t soon forget. Some of the connections made in Insects and People have lasted for a decade or more.

“I work with insects for insects’ sake,” said Zack, who focuses on no single bug, but instead spreads his attention across the vast realm of creepy crawlers. He has trekked the globe, visiting five continents to search out special creatures and share knowledge.

“Insects are involved in everything. What better model to talk about all the different aspects in science?” said Zack, who blends basic entomology with history, culture, and the movies. He has the opportunity to go weirder, donning a chef’s hat every autumn to serve up cricket chili or mealworm tacos at the annual WSU Insect Lunch.

“You’re teaching science, but in a way non-scientific students can appreciate. And maybe, they don’t even realize you’re teaching them that much science!”

It’s no surprise that many students say Entomology 101 is one of their favorite courses—so much so that many alumni and former students have stayed in touch with Zack for years after graduation.

“T’m the designated question answerer,” said Zack. “Out of the blue, I’ll get former students who remember we were talking about a subject: ’I went out the other day and saw those insects, and I wanted to tell you!’”

“For me, as a professor, these connections have always been a joy,” he said. “A university education is something that should last for the rest of your life. When someone gets back to me, five or 10 years later, it shows me that they remember the class, that they got something out of it.”

“Over Dad’s Weekend, I made sure that my dad tried some ‘bug chili’ with me, which we both still look back on as being one of our favorite events. I really enjoyed the take-home activities, such as one where we cared for a caterpillar while it became a moth. My roommates also enjoyed seeing the process.”

Alexa Makhani
Class of 2009

“I stayed connected with Professor Zack because of his kindness, knowledge, and expertise. Before, I thought of insects as quite insignificant, random pests. I now have an appreciation for how significant insects are to humans around the globe.”

Patrick Old
Running Start student

“Professor Zack and I have stayed in contact even today. I have a lot of respect for him and his work, and I always like to hear his stories. During college, I was on a tennis team; he was one of the big supporters of our program. Dr. Zack and I have developed a true mentorship/friendship that goes beyond class subject matter.”

Andjela Kankaras
Class of 2013
PARTNERS FOR A CLEANER PUGET SOUND

Stormwater is the number one pollutant in Puget Sound. Waste and chemical runoff from streets and lawns flow into streams, lakes, and bays, polluting the environment.

The Washington Stormwater Center, located at WSU’s Research and Extension Center in Puyallup, is working with the Boeing Company, the Bullitt Foundation, and the Russell Family Foundation to clean up stormwater.

The Russell Family Foundation provided seed money for WSU stormwater research.

“Without the Russell family, we would have had a large stormwater facility, built with state funds, but no money for work,” said John D. Stark, professor of ecotoxicology and director of the Washington Stormwater Center.

The Bullitt Foundation has long supported the center’s low-impact development training program.

“Bullitt supports the Washington Stormwater Center because of its important role in advancing the change from traditional hard surface and pipe technology to natural systems,” said Neelima Shah, program officer for the foundation.

Boeing funded the Municipal Stormwater Educator role for several years and partners with the center to research recycled carbon fibers that remove pollutants in permeable pavement.

“Water is one of our most precious resources, and Boeing is proud to be involved in regional efforts that use innovative ideas and technologies to help solve challenges such as stormwater runoff,” said Sam Whiting, director of Global Corporate Citizenship for Boeing Commercial Airplanes. “We are proud to be recognized as an industry leader in collaboration on environmental issues important to aerospace and our communities.”

“All three organizations have been instrumental in our success as a center,” says Stark. “We are extremely grateful to all three for their commitment to better water quality and a safer Puget Sound.”

FROM TOP
To reduce runoff into streams, more permeable pavement lots and sidewalks are being built. At the Low Impact Development (LID) research facility at WSU Puyallup, scientists are taking a full-scale, long-term look at the effectiveness of pervious paving.

New knowledge and tools being developed at the Washington Stormwater Center will help ensure migrating salmon have a chance to spawn before it’s too late. Our researchers are developing green infrastructure to help turn around increasing prespawn mortality in the iconic fish.
Expanding Organics to Everett

WSU’s groundbreaking organic agriculture major could soon be coming to the Puget Sound.

In an expansion of the Pullman-based Agricultural and Food Systems interdisciplinary degree program, WSU is exploring partnerships with community colleges in Seattle, Everett, and Mount Vernon to add the Organic Agriculture Systems major to WSU’s North Puget Sound campus at Everett, Wash.

“Our goal is to translate the major to Everett to create better access to the degree for place-bound students interested in organic production,” said Ron Mittelhammer, dean of CAHNRS.

WSU Regent’s Professor Dr. John Reganold spearheaded the effort to start the organic major—the first of its kind in the nation—at WSU in 2006.

“The growing demand for organic products has created the need for employees who understand the unique production, processing, and marketing approaches used in organic agriculture,” said Reganold. “This major addresses that need.”

At Everett, students will work with industry partners, Extension specialists, and faculty from WSU’s Mount Vernon Northwestern Washington Research & Extension Center to pursue internships and research projects that complement what they learn in the classroom.

“Engaging with students close by adds an important dimension to the work of faculty and graduate students at Mount Vernon,” said Chad Kruger, director at Mount Vernon.

“The impact of expanding our efforts in organics to Everett is a game changer for WSU,” Mittelhammer said. “It’s an exciting opportunity to showcase what we do in the food production arena and why that work matters.”

Watershed Ideas Flow into Puyallup

It’s called the Confluence. The senior capstone course for students in WSU’s Landscape Architecture (LA) program combines education and experience to produce design solutions that engage and change communities.

“Students gain direct insights from people who live in, work in, and care about their landscape,” said course instructor Jolie Kaytes, LA chair.

For their 2016 project, landscape architecture students Jeremy Auer, Andrew Christiani, Bryan Navarro, and Taylor Weik—now WSU alumni—focused on improving urban and natural environments in the Puyallup River watershed. They met with dozens of community and alumni partners, including the Washington Stormwater Center and the Russell Family Foundation.

“The big picture is that water needs to be managed on a wider scale,” said Washington Stormwater Center researcher and WSU Associate Professor Ani Jayakaran, who advises students.

Issues in the watershed are complex and interrelated, said Henry Izumizaki, strategy director for the Russell Family Foundation, which hosted design presentations at their Gig Harbor office.

“Innovative ideas come in many forms, and among them are contributions from students in their capstone process,” Izumizaki said. “Student research and ideas are refreshing and add to the continual process of envisioning a more just and healthy future for our people and their watersheds.”

The spring 2017 capstone course will again focus on the Puyallup watershed.
When pregnant women experience chronic stress or trauma, the fetus is affected. Stress can influence development and put a newborn at risk for anxiety and physical health problems.

Sara Waters, an assistant professor in the Department of Human Development at WSU Vancouver, studies just how these issues develop and how to prevent them.

“This is about intervening at the earliest possible stage to help lower a child’s risk for mental and physical health problems, among other issues,” Waters said.

Waters is the lead investigator on a WSU Grand Challenges team researching psychological, physical, and nutritional aspects of prenatal health.

“We’ll collect the same biological markers in the mom at six months postpartum as we did during pregnancy,” Waters said. “And we’ll also measure stress in the infant by tracking their heart rate while they go through a mildly stressful task with their mother. We’ll show something a little bit scary, like a clown mask, and record the baby’s reaction. Their fear response tells us something about their risk for problems with anxiety when they are older.”

The team measures the hormone cortisol, which is released when people, including babies, are in stressful situations. Cortisol has been shown to change a person’s epigenetics, but the team hopes to see if that’s true and exactly how it works, Waters said.

“A stressful pregnancy doesn’t mean a baby is doomed to negative outcomes for life,” she said. “Babies are resilient, but it’s important to get things course-corrected early by having good relationships after birth to avoid potential long-term results.”

Their $74,000 seed grant allows the team to get preliminary data from a small sample size. That data will help them go after larger grants for long-term data collection.

“We want to continue the study,” she said. “We then hope to have a rich data set and follow the original babies into toddlerhood to see how they’re doing. And maybe even expand the sample to include more moms and babies.”

The Grand Challenges seed grants awarded a total of $350,000 for projects that demonstrate a strong potential for future funding, the capacity for significant public engagement, or outreach to underserved communities.

“I think the Grand Challenges are timely and relevant,” Waters said. “WSU is investing in big research questions. We want to solve population health problems.”
On December 6, 2016, the WSU Mount Vernon Northwestern Washington Research and Extension Center marked the 10th anniversary of the opening of the Agricultural Research & Technology Building with a celebration of their entire 70-year history.

“This center is a great conduit for the community and the university to have a back-and-forth connection,” said Chad Kruger, the director of the center. “The work our researchers do directly benefits farmers in the region and the state.”

The celebration marked a major transition from an aging facility to a state-of-the-art laboratory and greenhouse facility to support current and future research, Kruger said.

“The research that comes out of the Mount Vernon center is vital to the sustainability of agriculture in northwest Washington,” said Rich Koenig, WSU director of Extension. “Its close ties with the community make it an ideal model for how Extension should work.”

WSU President Kirk Schulz was among the university and community dignitaries who came to commemorate the anniversary, looking at pictures of previous facilities and discussing what’s been accomplished with the renewal.

A decade ago, a significantly different landscape existed.

“The center was 65 years old and falling apart,” said Debbie Inglis, a WSU professor and Extension plant pathologist. “We only had three faculty members, a couple of graduate students, and very dated buildings and labs.”

Inglis served as the director of the research center from 2004 to 2008, a few years after local residents and farmers in Skagit County and surrounding areas were encouraged to envision a new facility and find the funding for it.

The renewal was similar to how the center originated in the 1940s, when the agricultural community in the region initially asked WSU for more research help.

“They assessed themselves, they held carnivals, asked for donations, whatever it took,” Inglis said. “And in the early 2000s, they did many of those same things to get this new facility.”

WSU committed to staff the facility if the community could help fund the buildings, a beneficial agreement for both sides, Inglis said.

WSU’s commitment has more than tripled with 10 faculty and 18 graduate students, far exceeding the intended capacity for the building.

“We built space for eight graduate students, and people thought that was too many,” Inglis said. “Now we’re overflowing. We’re growing and excelling.”

The celebration focused on the past, present, and future of the facility, not just the 2006 upgrade. Part of that future includes working with faculty on the new WSU Everett campus.

“We’re really focusing on the next 12 to 18 months,” said Kruger, who took over as director in 2015. “Our current projected growth from offering new undergraduate programs through WSU North Puget Sound at Everett and additional growth here in Mount Vernon both require maintaining our high standards. And thanks to the support of the community here, we’ll be able to keep supporting agriculture in western Washington.”
Jim and Lee Ella Ruck: Cougs for Life

They met at what was then called Washington State College, graduated in 1954, and married that summer. Jim and Lee Ella Ruck are Cougs for life.

“Life at Washington State was very much centered around studying and campus activities,” remembered Jim. “The challenge was learning how to balance our lives. We do believe the college experience helped us set priorities and achieve all we wanted to in life.”

Jim went on to earn an advanced degree and worked in the state corrections system, a vocational center for the disabled, and as a manufacturer’s sales rep. Lee Ella became an educator.

They both stayed connected to WSU, returning to campus for special occasions, such as the 50th anniversary of Regents Hall dorm. The couple has given to WSU for 59 years.

“Our first gift was $15,” said Lee Ella.

Now, the Jim and Lee Ella Ruck Scholarship supports graduate student researchers in the School of Food Science.

“With my background in home economics, I have the strong feeling that nutrition is a very important factor in everyone’s life,” said Lee Ella. “Our endowment helps a food science student with books, trips, and incidentals so they can do what it takes to let others know the importance of nutrition.”

“Joe and Val Hillers: Do as Cougs Do

Learn by doing: This was the idea that motivated Joe Hillers to found CUDS, Cooperative University Dairy Students, in 1977. Since then, dairy science students have managed their own herds, better preparing them to enter the dairy industry.

“We’re an employer, there’s no question I’d value that,” said Joe, who retired in 2000 after 35 years with the Department of Animal Sciences.

CUDS was successful when it started, and took off quite rapidly,” said Joe’s wife Val, herself a retired Extension food specialist and WSU alum.

CUDS is entering its 40th year, with more than a dozen WSU students now milking and caring for their own herd of Holsteins. Milk from the cows goes into WSU’s nationally recognized Ferdinand’s ice cream.

“We’ve put hundreds of students through that program,” said Joe. “They’ve gone on to make many real contributions to the dairy industry, not only in Washington, but all over the country.”

Now in Coupeville, Wash., Joe and Val support the Joe K. Hillers Dairy Education Endowment fund, which sends animal science students to farms, national meetings, and competitions to broaden their industry knowledge.

That’s in keeping with Joe’s educational philosophy of learning by doing.

“Success of students is not independent of who they know,” he said. “This gives them an opportunity to get to know lots of other people, find a mentor, and hear new ideas.”

Food scientist and graduate student Ewa Pietrysiak, above, who comes to WSU from Poland, works to improve the nutrition potential of proteins in plants.

“With the right ratio of pea and rice proteins, we can provide all essential amino acids,” said Pietrysiak. “That’s very important for vegetarian diets.”

The Ruck award helps her buy lab supplies and travel to national conferences.

“The Rucks’ generosity motivates me to continue my hard work and complete my degree with as much experience as possible.”
Jean and LeRoy Rogers: Cougs’ Close Ties

With more than 50 years of experience as WSU faculty, Jean and LeRoy Rogers mentored students to overcome struggles and find true success.

Roy was in farm management and finance from 1967 to 1986, chairing the department of Ag Economics, now the School of Economic Sciences, for nine years. Jean served as a teacher and administrator in what is today the Department of Apparel, Merchandising, Design and Textiles (AMDT).

“We knew our students and were therefore able to understand their needs,” Jean said. “Working one-on-one with students, we could help them identify goals and find greater success as students, and often as professionals after graduation.”

The pair started the LeRoy and Jean Rogers Scholarship to help SES and AMDT undergraduates pay for college. Their biannual award has helped more than 40 students.

Close ties to the students were the Rogers’ greatest satisfaction in teaching and working at WSU. Roy’s most memorable teaching moment is when a downtrodden junior was thinking of dropping out.

“We spent an hour having coffee and discussing his future,” said Roy. “He stayed in school, graduated, and found good employment in his field of study. This may well have been my most satisfying experience during my 29 years at WSU.”

The Rogers now live on their farm in Oregon’s Willamette Valley.

School of Economic Sciences student Max Mielke grew up on the family farm near Davenport, Wash., working the same ground his great-great grandfather homesteaded in 1883.

“I chose SES because I saw the value that an Ag Econ degree has,” said Mielke. “How economics has a role in everything.”

Mielke’s studies aide those in the beef industry to better understand how beef prices are influenced. He would like to travel internationally to help other countries as well.

“I am incredibly grateful to the Rogers for their help toward my college degree.”

Sarah Allen, a 2016 apparel merchandising alum from the AMDT department, was a Cotton Ambassador for Cotton Incorporated, an industry trade organization, her senior year.

Because of the Rogers scholarship, Sarah was able to balance a full load of classes while raising student awareness of industry resources, which put her organization and creativity skills to the test.
Forging meaningful connections is what we do at Washington State University. Sometimes, they’re love connections.

Riley Nelson and Erik Hille made one such connection in 2012. As students in Ag Tech, their friendship began when Erik offered to give Riley a ride home. At the time, neither realized the number of miles they’d log to see each other after graduation.

Their careers landed them states apart, but Riley and Erik conquered the distance. They married in September 2016 surrounded by friends, family, and fellow Cougs. Now, they reside on the family farm in Ritzville.

How do you stay connected?