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right: early morning light on the way to the spark—an academic innovation hub—part of WSU’s creative corridor

Photos robert hubner
Glenn Leitz '52 farmed in Fairfield, Washington. He recently gifted his farmland through his estate to WSU. Through the Land Legacy program, WSU agreed to keep Glenn’s land and use the farming income to support crop and soil science research. Glenn believed research is what keeps Washington agriculture competitive in global markets, and he was adamant farmers need institutions like WSU to carry out and disseminate that research.

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Glenn Leitz ’52 farmed in Fairfield, Washington. He recently gifted his farmland through his estate to WSU. Through the Land Legacy program, WSU agreed to keep Glenn’s land and use the farming income to support crop and soil science research. Glenn believed research is what keeps Washington agriculture competitive in global markets, and he was adamant farmers need institutions like WSU to carry out and disseminate that research.

A Walk Through Campus / Rachel Jones  WSU STUDENT
“An landscape drawing of my favorite walk through campus, along the back side of Bryan Clock Tower.”
Finding the path  As a younger man on hikes, I would scramble straight up hills on my way to the top. Now, I’m not quite as sprightly, and I tend to look more carefully for a better path that will get to the destination. We all face the inevitable march of time, and it requires us to seek out different ways to adjust to age.

In this issue, you can read about Washington State University researchers in human development, nursing, and other areas who are working on “optimal aging,” living the best quality life possible given individual circumstances. This might include chronic illnesses, physical limitations, or cognitive decline. Other aspects of getting older also receive attention from WSU scientists: improving brain health to stave off dementia, leveraging the knowledge of pharmacists to manage medication, and developing comfortable, fabric-like material that can easily monitor health.

All this work is designed to help people choose their own path as they age, whether that’s continuing to live at home or moving into senior living communities, or with assisted care. It also can ease the work of caregivers, who are often family members.

We have to find our way when we’re young, too, especially with education. The rise in school absenteeism and truancy has reached critical levels nationwide. A WSU research team has expanded a tool to help guidance counselors and other school personnel to assess chronically absent students and identify causes. This could help tailor support and stem the tide of truancy.

There are always forks in the road and decisions to be made. Not all of us can fly across the Pacific, like aviation pioneer Clyde Pangborn who’s profiled in these pages, or drive a long-haul truck in retirement, like David Longanecker who’s also spotlighted in this issue. But finding the right path can often give us the life we want.

READERS, PLEASE NOTE that the magazine’s print distribution is changing for the Winter and Spring issues. You can find details on the back cover on how to continue receiving all issues of the magazine. Basically, if you donated $10 or more to WSU within two years, you can get the Winter and Spring issues in your mailbox. As always, all magazine issues and stories (plus extra videos and more) are available at magazine.wsu.edu.

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Washington State Magazine is pleased to acknowledge the generous support of alumni and friends of WSU, including a major gift from Phillip M. ’40 and June Lighty.
Gleaming memories

I want to throw in my two cents regarding Professor David Stratton of the history department [Winter 2023]. I was a Cougar undergrad in the early ’90s, minoring in history. It was an absolute treat to listen to Stratton teach on the characters of the frontier American West such as Jedediah Smith. He did so in his cardigan sweater with a grandfatherly, joyful gleam in his eye. He would also play part of the lesson on a little record player to help embellish the topic.

He was a gem of a professor. It was teachers like him that made my WSU experience both memorable and worthwhile. I’ve always remembered him.

STEVE GOODMAN ’94 ENGLISH
MOUNTLAKE TERRACE

Watershed history

I enjoyed the [Summer 2024] article about the Waterworld exhibit at Expo ’74. That exhibit was one of my favorite parts of the expo, especially the watershed model. And speaking of that, I can provide an update about the model.

The watershed model was made of four-inch layers of Styrofoam that were glued together; carved into the shape of mountains, valleys, and such; and then joined in sections. In the spring of ’76, a number of the mechanical engineering students agreed to hold a hovercraft design competition for our senior design project. After the expo, the model was stored in pieces in the hydraulics lab, and we got wind of that. We were given permission to repurpose the Styrofoam pieces to construct our hovercrafts.

On our team, we used a large sheet of the Styrofoam suspended beneath the deck to meet the flotation requirement, and we carved layers of it to form the duct around the lifting fan. The layers can be seen in the above photo (with me driving, by the way... too fun). As can be seen, other components included plywood, chicken wire, plastic tarp, rope, and duct tape. To verify hovercraft performance, we held the competition in the pond behind the Chief Joseph Village Apartments, where the photo was taken. Another team used layers of the Styrofoam to make the entire hull of their hovercraft, with ducts and flaps inside the hull to steer it. Alas, it proved too heavy to lift.

GARY E. SPANNER ’76 MECH. ENG.
PASCO

Lane Ficke (’82 Comm.) and daughter Michelle Ficke (’09 Intl. Busi.) joined family members on a February 2024 trip to Portugal. They proudly displayed the cougar flag at the Pena Palace in Sintra, Portugal. Says Lane: “We felt honored to show off this amazing logo for our beloved school in Europe. Go Cougs!”
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FROM THE president

My last year at Washington State University has begun. There will be lots of time for reflection before my retirement in June and much still to be done before I step down. But this seems like the right time and place to say thank you.

The best part of any job is the people you get to work with, and as president, I’ve been surrounded by a fantastic group of leaders across the WSU system. The same is true of the faculty, students, and staff I had the privilege of collaborating with over the years. There are countless dedicated, smart people across the university system.

I also want to thank our WSU alums and community partners. Your support is critical to WSU’s success.

The strength of our Coug community buoyed us during challenging times: COVID-19, a shifting athletics landscape, divisions in society, even the pace of change.

In talking with colleagues at other universities, I know everyone’s feeling unsettled right now. But change has always been part of the job of a university president. I think of my predecessors at WSU like Sam Smith, who opened campuses statewide, and Elson S. Floyd, who created a medical school.

I believe this dynamic environment is our new normal as public higher education evolves. My expectation is that we’re moving toward a future with somewhat fewer broad-scope public research universities and more specialization at the regional level. But I also believe WSU is strategically well positioned for this future. We have campuses and faculty in all the major metropolitan areas of Washington and a state economy that will need hundreds of thousands of new college graduates in the coming years.

My goal for my last year at WSU is to wrap up major projects and pave a smooth runway for my successor. We’re close to launching a joint doctoral program with the University of Nairobi in Kenya, and I’d like to see that happen; WSU’s work on infectious diseases in East Africa could be life-changing. I want a stable enrollment environment for the next president, and I’m pleased to say we’re making great progress there. I also plan to spend a lot of time on the road to build WSU’s fund-raising capacity.

Once I step down, though, I won’t hang around. Noel will still be on faculty and director of the Institute for Northwest Energy Futures, of course, and we plan to retire in Spokane. But it’s important to me that the new president has the space to define their presidency on their terms.

That’s nearly a year off, and I’ve still got a lot of work to do. I hope you’ll join me in whatever way you can to make this a breakout year at Washington State University. You’ll have my gratitude.

KIRK SCHULZ
President, Washington State University
The crack of a bat hitting a ball: that’s the sound of science at Washington State University.

The WSU Sports Science Laboratory specializes in the dynamics of balls and bats for the NCAA and other athletics leagues nationwide. You could say WSU is knocking it out of the park.
The mariachi music pouring out of Kimbrough Hall rehearsal rooms isn’t a recording.

It’s one of Washington State University’s newest musical groups, Mariachi Leones del Monte—loosely translated by its members as Cougar Mariachi—practicing on Wednesday evenings.

Many people are familiar with the distinct sound of mariachi: a unique blend of trumpets, violins, and various guitars. Historians believe mariachi originated in Mexico in the eighteenth century. When migrants traveled from Mexico to the United States in the early 1900s to work in the fields, they brought mariachi music.

Today, mariachi music is a staple in agricultural towns throughout central Washington, including Wenatchee, where WSU seniors Natalie Valdez and Daniela Alpire went to high school together. They say it is nearly impossible to attend a birthday party, a wedding, or a graduation without being entertained by a mariachi band. Valdez and Alpire played guitar together in their high school’s mariachi band, where Alpire also sang.

“Practicing and performing mariachi was a big part of our lives,” Alpire says. “When Natalie and I came to WSU, we missed playing music together and the camaraderie associated with being in a mariachi band.”

Alpire and Valdez formed Mariachi Leones del Monte in spring 2023 and interest in the band (also a registered student organization) is proliferating. Its 17 members are invited to perform at celebrations across campus and occasionally play at community events such as Pullman High School’s Multicultural Night.

Through its partnerships with WSU’s College Assistance Migrant Program, the Chicanx Latinx Student Center, the Undocumented Student Center, and the student organization MEChA, the band has been able to purchase instruments and suits, called trajes, making it easier for students to join.

“These things are expensive to buy, and we can provide them at no cost to students,” Valdez says. “And we don’t turn anyone away who wants to play in the band, even if they are just learning to play an instrument.”

That even applied to the band’s advisor and violinist, Darryl Singleton. The assistant professor of Black music, social justice, and jazz percussion in WSU’s School of Music is very familiar with mariachi, having lived in Mexico for an extended time. Still, he did not know how to play the violin when he joined the band.
“My leadership style is to be an active leader, and the students know that whatever I ask them to do, I am willing to do it along with them,” Singleton says. “The band needed another violinist. I’m probably the worst violinist in the group, but it gives me a deeper connection with the students.”

Singleton says mariachi’s many different styles, including the fast-paced polkas, waltzes, and love songs, keep listeners on their toes and entertained.

“What I love about the music is how it describes the love of the land, the people, and national pride in Mexico,” Singleton says. “To me, that’s what sets mariachi apart from other genres.”

Alpire says the songs speak to the traditions and struggles Mexican people have experienced. Yet the band makes sure to leave their audiences feeling good and empowered.

“Being able to project a feeling of joy is one of the biggest aspects of mariachi,” Alpire says. “We try to bring a positive energy to our audiences and encourage them to clap, dance, and sing along if they want to.”

While WSU’s mariachi band provides quality entertainment and gives its members an important connection to their culture, Valdez and Alpire say it also serves as a valuable student recruitment tool, boosting the university’s pursuit of becoming a Hispanic Serving Institution.

Many school districts throughout central Washington have mariachi programs that provide opportunities for students to learn and play mariachi as early as middle school. After devoting so many years to playing mariachi, some students look for opportunities to continue playing after high school.

In April 2024, WSU’s mariachi band invited high school mariachi bands from Othello, East Wenatchee, Pasco, and Grandview to the Pullman campus. The visiting bands spent a day sharing music, touring campus, and learning about WSU’s academic and student support programs.

“We want students to know that WSU is a good option for them,” Valdez says. “They can see their culture is present here and that there are so many things they can get involved in, including our mariachi band.”
Where, oh where, have they gone?

BY LARRY CLARK

A girl was chronically late for first period at her high school. The school counselor met with her, and they took a quick assessment that launched a conversation.

They found out that the girl was responsible for getting her younger sisters ready every morning, and the school adjusted her start time so she could make it to school last year.

“She wasn’t doing anything negative or bad. She had more responsibility at home than most kids have,” says Brian French, Berry Family Distinguished and Regents Professor at Washington State University’s College of Education. It’s important to understand the environment to get students back to school, he says.

French and a team of WSU researchers manage and refine the tool used by the student and school counselor: the Washington Assessment of the Risks and Needs of Students (WARNs). The 40-question, web-based assessment for middle and high school students offers a way to identify individual reasons for missing school.

WARNs is crucial as a wave of truancy and chronic absenteeism sweeps across schools throughout the country. About 26 percent of public school students in most states were considered chronically absent—typically missing about 18 school days for any reason—in the 2022–23 school year. That’s up from 15 percent before the pandemic, according to an American Enterprise Institute study.

Chronic absenteeism hinders educational recovery from the pandemic, too. If students aren’t in school, they can’t learn and their absence disrupts classrooms.

Washington state has another motivation for the WARNs assessment. The “Becca Bill” law requires all children between the ages of 8 and 18 to attend school regularly, and schools to work with families to ensure attendance.

Paul Strand, a psychology professor at WSU Tri-Cities, says WARNs measures six areas critical to healthy social, emotional, and educational development: aggression-defiance, depression-anxiety, substance use, peer deviance, school engagement, and family environment.

A trained child psychologist, Strand says those dimensions can “try to identify reasons why kids haven’t come back to school.”

Almost half of Washington school districts use WARNs. The assessment can help provide a framework for school counselors and others to start conversations with youth and create personalized action plans for improving attendance.

Conversations and rapport with school personnel are key to translating WARNs into meaningful action, French says. Counselors can ask students, “What’s going on in your environment? What can we change that helps you get back on track?” That’s the power of that type of information,” he says.

Thao Vo (’15 Psych., ’19 MA, ’24 PhD Ed. Psych.), who works on WARNs, did a deep dive for her doctoral dissertation with three school districts—a rural, suburban, and urban district—to find how they used WARNs.

“I wanted to know how specialists navigate this idea of chronic absenteeism, truancy, and overall risks for disengagement,” Vo says.

She found each district had distinct responses based on resources and school procedures. For example, Vo says the rural school district leans into family and community to meet student needs, since many services are farther away.

The WARNs team trains school personnel, and they work closely with school districts on ways to use and improve the assessment. “We want to be responsive to schools, so we provide them with different ways to think about scores and how to interact with kids with respect to their scores,” Strand says.

For example, Chad Gotch (‘12 PhD Ed. Psych.), an associate professor in educational psychology, works with the team to develop fictional vignettes for each test dimension as conversation starters with students.

Gotch notes that the tool offers another important benefit. “WARNs is an opportunity to connect a student with an adult who cares,” he says. “And we know that can be powerful.”

French says the future for WARNs could be a modified instrument for elementary school students, a shorter version, and possibly expansion to more states. WARNs is already used in a few Wisconsin, Virginia, and Minnesota school districts and youth service providers.

WARNs can be powerful for students as well as schools. “We want to see changes that actually increase student empowerment, engagement, and strengthening relationships with school staff and family,” Vo says.

French and the WARNs team feel those outcomes are a rewarding way to help the state’s communities.

“It is meaningful work. What’s more essential than helping kids stay connected to school? It’s just a very fundamental thing that we should be engaged in,” Gotch says.
EXTRAORDINARY ACCOMPLISHMENTS

Each year, the WSU Foundation salutes its most exceptional volunteers for their generous contributions of time, talent, and leadership, as well as the profound impact they have had on Washington State University.

Congratulations to all the 2024 honorees, who were recognized at the Volunteer Awards Celebration and Reception at WSU Spokane this past spring.

WELDON B. GIBSON
DISTINGUISHED VOLUNTEER AWARD
The Gibson Award represents the highest distinction bestowed upon a WSU Foundation volunteer.

2024 Gibson honoree Betsy Cowles has served WSU for nearly three decades, from working to build the WSU Spokane campus to providing exceptional leadership and advocacy that have furthered the dreams of students, faculty, and programs across WSU and the state.

WILLIAM F. “BIFF” BROTHERTON
COUGAR SPIRIT AWARD
The Brotherton Award recognizes passionate supporters of both Cougar Athletics and WSU.

2024 Brotherton recipients Greg and Jayne Beckel are tireless supporters of Cougar Athletics and WSU who have advanced state-of-the-art athletics facility projects with their passion and leadership.

Our warm congratulations also to our 2024 OUTSTANDING SERVICE AWARD RECIPIENTS
Mike Cappetto • Paul W. and Betsy A. Sunich
Erik Carlson drove a truck filled with colored tubes and other sculpture components from Cranston, Rhode Island, to Pullman at the end of spring 2024. Over three days, he helped install a major new piece of public art on the Washington State University campus. Entwine now cascades down three floors in the Plant Sciences Building opposite the football field.

With funding from ArtsWa and as part of the Art in Public Places program, WSU’s campus art committee selected Area C Projects, consisting of Carlson and Erica Carpenter, to formulate their challenge: create a work of art that acts like a plant, or approaches the surrounding structure of the Plant Sciences Building as a type of growing medium.

“We were inspired by the art committee’s comments and the nature of the research being done in the Plant Sciences Building to push ourselves and develop a decentralized artwork that literally entwined itself with the building. We also wanted to create an artwork that offered multiple scales and points of engagement, reflecting our multifaceted relationship with the plant kingdom,” Carlson says.

The artists created a work that mirrors the growth of plants. Rootlike forms of colored tubes emerge from the exposed pipes, ducts, and electrical conduits of the Plant Sciences Building.

The colored tubes feature custom-made glass caps. Some of these caps include lights. Others reveal internal fluorescent colors. The glass, at times, magnifies. It also catches the light in compelling ways.

The pipes, in places, cluster in bunches, where boxes with bubbled glass windows invite visitors to further explore the structure.

According to Area C’s proposal, “The artwork mimics the relationship between epiphytes, plants that grow harmlessly on the surfaces of other plants, and phorophytes, the sturdier plants that provide epiphytes the base from which to grow … the artwork and the building commingle to the point that it can be unclear just which portions of these climbing, probing tubes are part of the building, and which are part of the artwork.”

The color palette is inspired by Nez Perce (Nimíipuu) woven bags whose natural dyes reflect the landscape of the region. The artists color-matched these plant-based dyes to modern paints used on the tubes.

These colorful tubular bundles build off the building’s water, air, and electrical systems to create something new, strange, plantlike, and wild in the public areas of the Plant Sciences Building.

The next time you’re watching football in Pullman or taking a photo in front of the Cougar Pride statue, consider crossing the street to also see Entwine.
Yes, the **Cougar Pride** sculpture can now be found on ALL our campuses due to a generous gift from Gary Schneidmiller ’71.

(Read about the **Cougar Pride** statues at magazine.wsu.edu/extra/pride-news.)

**WSU CAMPUSES** have many other remarkable and inspiring works of art viewable to the public. The next time you visit a campus, find the works with our maps and guides to sculptures, paintings, and other art installations in Vancouver, Pullman, Tri-Cities, Spokane, and Everett:

magazine.wsu.edu/extra/campus-art-guides
A Life Impossible

LIVING WITH ALS: FINDING PEACE AND WISDOM WITHIN A FRAGILE EXISTENCE

BY STEVE GLEASON (’00 BUSI.) WITH JEFF DUNCAN

ALFRED A. KNOPF: 2024

HE CAN NO LONGER MOVE OR BREATHE. And that makes getting ready each morning quite a “workout.” Steve Gleason starts his autobiography by describing what he endures to prepare to face the day. A ventilator breathes for him while a crew of caregivers performs a string of mundane tasks: showering, getting dressed, having breakfast. These are actions that most take for granted, chores people complete each morning without much thought, things that make the former football standout feel powerless.

Imprisoned in his own body, once the exemplar of athleticism, Gleason tackles what is perhaps his most courageous feat: candidly sharing his journey through the withering, excruciating, and incurable disease amyotrophic lateral sclerosis, or ALS. His inspirational memoir serves as a testament of the will to live.

“I do not take one glorious, oxygen-rich ineffable breath for granted,” writes Gleason, who has now lived with ALS longer than he played professional football. He has leveraged his star power to reach a wider audience—through his Team Gleason nonprofit committed to improving the lives of people with ALS, the 2016 Gleason documentary detailing the first five years of his diagnosis, and this intimate and profoundly vulnerable portrait of psychological perseverance.

At Washington State University, Gleason played baseball and football, helping the Cougs get to the 1998 Rose Bowl. The Spokane native and Gonzaga Preparatory School graduate details this and other milestones—along with his “no white flags” motto—in his unsparring narrative. “My attitude was, I have this diagnosis and even if it does crush my body, it’s not going to crush my mind and spirit. It’s not going to define my life. This is my opportunity to be an example to other people, and to my family—an example of resilience.”

In 2010, Gleason began to notice “strange twitches” in his upper arms and shoulders. They spread to his chest. Lower back. Upper quads. He experienced increased muscle spasms and weakness, underwent a battery of tests, withdrew from his MBA program, took a leave of absence from his job, and started searching for a miracle.

Gleason was 33 in early 2011 when he received the devastating diagnosis. Weeks later, he learned his wife, Michel, was pregnant with their first child. The couple wed in 2008, the same year he retired from the NFL. Gleason had played for the New Orleans Saints since 2000 and is perhaps best known for his 2006 blocked punt in the Saints’ first game in the Superdome following Hurricane Katrina.

Within a year and a half, Gleason was losing his ability to move his thumbs. “Three years into my diagnosis,” he writes, “the disease had stolen nearly all of my physical abilities and affected every aspect of my life.”

ALS is relentless. Most die within two to five years of the diagnosis. Gleason is, he says, “more than ten years past my expiration date.” He wrote his story with eye-tracking computer technology and help from sports columnist Jeff Duncan.

His disbelief becomes acceptance. He waxes philosophical, pens notes to his children, Rivers and Gray, and shares letters with his wife. He doesn’t understate the effects of ALS on any aspect of his being. “ALS is a training ground for wanting only what you have,” he writes. “As you have less, you must learn to want less. You must find new creative ways to explore and expand.”

Still, he admits, “The loss of my voice was particularly crushing.”

It seems, however, that though he can no longer speak, his voice is now more powerful than ever.

—Adriana Janovich
Excerpt from *A Life Impossible*
by Steve Gleason

On January 5, 2011, I was diagnosed with amyotrophic lateral sclerosis, a rare neurodegenerative disease that damages the nerves that control voluntary muscle movement. ALS, commonly known as Lou Gehrig’s disease, is relentless and humiliating. It progressively robs people of their motor skills and, in turn, destroys their quality of life. Although your senses and brain remain sharp, you gradually lose the ability to walk, talk, swallow, and breathe.

Today, I’m well past the point of being able to move, talk, or breathe on my own. The powerful legs I once used to race down-field on National Football League kickoffs now are withered. My arms, once muscled and ripped, are frail and motionless. My 5-foot-11 frame, once a strapping 210 pounds, is now an emaciated meat sack of flesh and bones. I’ve lived in a wheelchair for more than a decade. I’ve lived on a ventilator since 2014.

Lou Gehrig, the famous Major League Baseball (MLB) player for whom the disease is named, died two years after he was diagnosed. Most people diagnosed with ALS follow in Gehrig’s steps—death comes a few years after diagnosis. I’m clearly biased, but I’d say I don’t look too shabby for being more than ten years past my expiration date.

Life with ALS prevents me from enjoying some of the things that ordinary people might take for granted. One of the realities of my life is that I’ve never hugged our kids, or more importantly, Rivers and Gray have never been hugged by their dad. Ever. If you saw your daughter weeping in the middle of your bathroom floor, wouldn’t you pick her up?

I expressed this tension between wanting to do more as a father and loving unconditionally to one of my mentors and teachers, Peter Crone, known as the Mind Architect. Peter insightfully responded, “Steve, your presence is enough.” Hearing those words, a massive emotional burden was lifted. I decided that being present is my purpose. I know it’s not true that I am not worthy or that I don’t matter. *My presence IS enough.* I live from this place.

My body is a prison. I face insurmountable adversity each day, yet my family and I are able to survive and live within this miraculous, wonderful life. I have learned to accept things that are out of my control, to transform suffering into strength. I move through fear to discover the extraordinary on the other side. We all face the impossible at some point in our lives. By exploring acceptance, love, and the power of the human spirit, I recognize the innate peace in the midst of chaos. There is light in the darkness. The light within all of us. Every day. Every precious moment. I know it. I live it.

Our “Pacific Lindbergh”

BY ADDY HATCH

Though not a household name now, Clyde Pangborn led a remarkable life of derring-do.

He made the first nonstop flight across the Pacific Ocean, at one point crawling outside the plane to fix a problem. Pangborn was also a barnstormer, a flight instructor, a test pilot, and a war hero.

Luckily, his exploits live on in mementos, photos, newspaper clippings, and letters housed in Washington State University’s library, donated by his brother Percy after Clyde Pangborn’s death in 1958.

The Pangborn brothers grew up in eastern Washington and north Idaho, but neither had a connection with Washington State College. Percy learned of the library’s archival work and wrote to ask if WSU would be interested in his brother’s papers.

Mary Avery, a library archivist at the time, said WSU was “most excited” to have a firsthand account of the history of aviation. She discussed the archive and Clyde Pangborn’s achievements in a 1967 program filmed at WSU.

Perhaps the most famous of Pangborn’s achievements was the first nonstop, trans-Pacific flight in 1931. That wasn’t Pangborn’s initial goal, however. He and navigator Hugh Herndon had hoped to set a record for the fastest around-the-world flight before bad weather dashed that plan. But they knew a Japanese newspaper was promising a $25,000 cash prize for the first flight across the Pacific, so they headed to Japan.

They weren’t greeted warmly. In fact, the Japanese police believed them to be spies and arrested them and confiscated their plane, the Miss Veedol. Correspondence in the WSU archive indicates the delicate negotiations that took place to free the aviators.

A letter to Percy Pangborn from the president of the company that sponsored the original around-the-world flight said there had been no press coverage of their arrest because the US State Department had “asked us to help them by not arousing an anti-Japanese feeling here in the states. It seems that there is a very bad political situation in Japan at this time . . .”

Pangborn’s mother wrote to US senator William Borah of Idaho, imploring him to use his influence on “behalf of the boys.” Borah responded, “I would not worry. Everything is being done that can be done and I think it will work out all right.”

It did work out. The aviators were fined and told to leave Japan and not return.

They loaded up the Miss Veedol with more fuel than was recommended for the 1931 Bellanca Skyrocket CH-400 plane and took off on the 4,500-mile flight—longer than Charles Lindbergh’s crossing of the Atlantic. To make the fuel stretch even farther, Pangborn designed a system to ditch the landing gear over the ocean; the initial drawings are among his papers at WSU. But two struts didn’t release, requiring Pangborn to climb outside the airplane in freezing wind, miles above the ocean, to loosen them.

Such a terrifying feat might have been easy for a former barnstormer like Pangborn, though.

After teaching flying in World War I, he toured the country performing “death-defying flying stunts” with the Gates Flying Circus. He received great acclaim for a “miracle of the air” in 1924, when a stuntwoman’s parachute caught on the landing gear of the plane he was showing newsreel footage of the flight’s actual landing and ticker tape celebrations.

Photos from the collection, as well as from additional sources, have been gathered in a special magazine photo gallery.

The Wenatchee Valley Museum & Cultural Center has a permanent exhibit on Clyde Pangborn, “Home Address: Anywhere in the Air.” They also provide a virtual tour.

The Spirit of Wenatchee has a replica of the Miss Veedol found at air shows throughout the Pacific Northwest. They also make presentations to schools and community groups to keep the memory of the first nonstop, trans-Pacific flight alive.

Here are online resources to learn more about this aviation first:

WSU Manuscripts, Archives, and Special Collections houses the extensive Clyde Edward Pangborn Collection. View some of its contents through their digital collections.

WSU Libraries’ films have videos discussing the collection and showing newsreel footage of the flight’s actual landing and ticker tape celebrations.

Find this all at magazine.wsu.edu/extra/derring-do.
Too hot on the feedlot

BY BECKY KRAMER

When Cougar football fans think of Will Derting ('05 Ag.), they probably recall his three interceptions in a 2002 game against Nevada, including a 98-yard return for a touchdown in front of a screaming crowd.

Derting now channels the intensity he displayed as a linebacker at Washington State University into operating feedlots in central Washington.

“I like high-pressure situations; that’s the similarity to playing football at the collegiate level,” says Derting, who owns Post 5 Cattle Company in Ephrata with his wife, Nicole ('07 Ag.), and manages several beef feedlots.

In recent years, managing the cows’ heat stress has become part of his workload. When the Pacific Northwest’s 2021 heat dome hit, it caught the region’s commercial feedlot industry by surprise.

“We had never really dealt with heat like that,” Derting says. “It came on fast and it was prolonged. Because it came at the end of June, the cattle didn’t have a chance to acclimate. When the temperature jumps from the mid-80s to 115 degrees in a week, they don’t have enough time to adjust.”

The cows still had most of their long winter hair, so they couldn’t cool down as easily as they do in late summer when their coats are sleeker. As a result, their weight gain and market value suffered.

With hotter summers in the forecast, “we realized we needed more tools to help us mitigate for heat,” Derting says.

That led to the Cattle Comfort Index. Launched in 2022, the index is a cooperative effort between WSU AgWeatherNet, WSU Extension, and the Washington Cattle Feeders Association, where Derting is a past president.

The association purchased 15 new weather stations and installed them near commercial feedlots. The stations feed data to AgWeatherNet, which produces a localized forecast with a seven-day outlook for temperature, humidity, wind speed, and solar radiation.

The Cattle Comfort Index’s modeling is sensitive enough to capture humidity levels from nearby irrigation projects and provides the detailed forecast feedlot managers need to make high-stakes operational decisions.

“You’re not just looking at your phone’s weather app and hoping the information is accurate,” says Jack Field, executive director for the Washington Cattle Feeders Association. “I know feeders who look at the data every single day, whether it’s 45 degrees or 100 degrees.”

Heat stress from climate change is a threat to the global livestock industry, with repercussions for weight gain, fertility, milk yields, and animal welfare. Depending on species, breed, and weather conditions, cattle can start experiencing heat stress at temperatures greater than 68 degrees, according to food security research.

Like people, cattle can develop respiratory distress or heat exhaustion during extreme heat. But even mild symptoms—such as decreased appetite—are a concern for animal feeding operations.

“Sometimes we see cattle that won’t come to the feeders,” says Sarah Maki Smith, WSU animal sciences regional specialist with Grant County Extension. “They’re not putting on the weight or producing the muscle mass

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What’s cookin’ with 4-H these days

BY BECKY KRAMER

Valerie Terry is teaching a dozen 4-H students how to make pita bread. As they follow along over Zoom, she throws in a quick food science lesson.

“See the carbon dioxide bubbles? They’re produced by the yeast feeding on the sugars,” says the Kitsap County 4-H leader, who is filming from her kitchen counter. As she punches down the dough, Terry explains that yeast also conditions the gluten so it traps the carbon dioxide, allowing the bread to rise.

Over two hours, students working in their own kitchens prepare a Greek dinner with lamb meatballs, homemade pita bread, and tzatziki sauce. The session includes a review of safe knife skills, accurate measurements, and how to avoid cross contamination of raw meat juices and fresh veggies.

Although Zoom classes are a pandemic-era innovation, teaching kids how to cook has been a staple of Washington State University Extension’s 4-H programs for more than a century. Last year, more than 1,500 Washington 4-H students took part in cooking, baking, food preservation, or related food science and nutrition classes. More than 300 adult volunteers led the classes.

“Cooking is a foundational part of our curriculum,” says Mark Heitstuman (‘87 Ag.), interim state 4-H director. “4-H is about positive youth development, and being able to make meals for yourself and others is an important life skill.”

Besides food preparation, 4-H students learn about meal planning and budgeting. Heitstuman says, “They realize they can put together a nutritious dinner for four people for about $30.”

For Terry and other 4-H leaders, getting kids excited about scratch cooking in the DoorDash era comes with its own rewards.

“If you know how to put together a meal, there’s a confidence that comes with that,” she says. “As the students’ skills grow, they realize, ‘I don’t have to ask Mom or Dad to take me to the store to buy a cake. I am capable of making these things for myself and others.’”

A former line cook and professional baker, Terry answered the call for 4-H cooking instructors in Kitsap County three years ago.

“My three girls are in 4-H livestock projects and archery,” she says. “Other parents were giving my daughters help with raising chickens and breeding rabbits, so I decided to give back by teaching cooking, which is my passion.”

Terry’s Zoom classes are “almost like a cooking show,” says Danielle Foss, the parent of one of the 4-H students. “The kids get a really good look at her step-by-step instructions, but they’re able to cook in the comfort of their own kitchen with their own tools.”

for people every day and still produce high-quality meat.” But the fermentation generates lots of heat. “On hot days, we can push the feeding back until later in the evening, so peak fermentation might occur around midnight instead of 7 p.m.,” she says.

At Post 5 Cattle Company, Derting says his cows are fed a condensed, high-calorie diet to enhance weight gain. But cows are like people, he says. If they’re uncomfortably hot, they won’t want to consume a big, heavy meal.

Derting’s team has adopted protocols based on the index. “If the Cattle Comfort Index is over certain thresholds, we’ve outlined the steps we’re going to take to protect our animals against heat stress,” he says.

There’s strategy, awareness, and adaptation involved—another parallel to being a linebacker.

With both cattle and football, Derting says, “you’ve got to love the game.”

we want them to. Getting cattle to the point where they produce hamburgers or steaks for us takes about 16 months. There’s a lot of hard work involved, and we don’t want to lose those gains.”

With advance notification of adverse weather, livestock producers can take action to keep their animals healthy, comfortable, and putting on pounds. Providing shade, misters, and airflow helps the cattle stay cool during heat waves. Adjusting feeding times and feed ratios can be beneficial, too.

As ruminants, cows have “a huge fermentation vat” in their stomach that helps digest things like cellulose, Smith says. “They can eat what would be a really terrible salad
During the Zoom sessions, Terry’s husband, John, runs the camera and acts as a moderator. When students have questions, they hold their mixing bowls, cutting boards, and sauce pans up to the camera for her inspection.

“Zoom allows me to open up the class to more kids and younger kids,” Terry says. “I do ask parents to cook with their children. I tell them, ‘This is your child’s project, but you’re there to make sure everything is safe. You’re acting as my hands because I can’t reach through the screen to adjust someone’s knife grip.’”

Ten-year-old Cassie Barlow started cooking with Terry three years ago. “I wanted to learn how to cook and make stuff by myself,” she says. As her kitchen skills increased, she has developed a go-to list of favorite recipes, including guacamole for parties and shepherd’s pie for family dinners.

“Cassie can go into the kitchen and break out a recipe,” says her mom, Michele Barlow. “She’s a lot more confident and independent.”

Ava Glick, 15, credits Terry’s classes for honing her ability to multitask in the kitchen. Reading through the recipes ahead of time helps her prioritize what should be done first.

“I’m better at time management when I’m cooking,” she says. “I can keep track of what’s happening on the stove while I’ve got something in the oven.”

At the end of two hours, Terry wraps up the meal prep with a flourish. The meatballs come out of the oven while the pita bread is still warm and after the flavors in the tzatziki sauce have had a chance to blend.

“Everyone likes hot food,” she says. “Cooking is a great tool for learning time management. Thinking through the steps to get a project done is a skill that translates to so many things.”

Opposite and at left: Four siblings from the Hosford family sample pita bread they made. Courtesy Hosford family. Above: Kitsap County 4-H leader Valerie Terry. Courtesy Valerie Terry / X Below: Pita with Greek meatballs. Courtesy Hosford family

For creatures—small to large

BY ADRIANA JANOVICH

One is for the number of veterinary colleges in Washington state. Two is for the number of students in the class of 1902, the first year the veterinary college produced graduates. Five is for the fifth oldest veterinary college in the country.

The Washington State University College of Veterinary Medicine, founded in 1899, celebrates 125 years of serving the state this year.

From humble beginnings—the college started in a single $60 shed—WSU Vet Med now houses the largest veterinary referral center in the Pacific Northwest, groundbreaking research, and one of the country’s top animal disease diagnostic laboratories. It treats thousands of animals—pets and wildlife—every year at the teaching hospital. The college has graduated nearly 7,000 doctors of veterinary medicine since its inception.
IN SEASON

Stone fruit

BY ADRIANA JANOVICH

THINK OF THEM as sunshine encapsulated in plump, perfumed orbs. Sun-ripened, they emit the sweet scents of summer, embodying long lazy days and evoking images of sticky juices running from fingers to elbows at backyard cookouts and picnics in the park.

Drippy and delicious, sumptuous stone fruits are quintessential summertime delights. Even their appearance—globes of gold, orange, crimson, and hues in between—epitomizes the warmth of the sun. So-called because of their center pit, or stone, which houses their seed, stone fruits are nature’s desserts.

Lucky for us, they ripen in waves all summer long.

Sweet cherries arrive early, in mid to late May, and are available through June and July. Sour, or pie, cherries overlap with apricots in July and August. Peaches and nectarines are ready mid-July through September. Plums cap the season in August and September.

Try to pick a favorite.

“There’s such a diversity of flavors and textures across stone fruits that it’s very difficult,” says Washington State University horticulture professor Matt Whiting (‘01 PhD Hort.). He focuses on whole-tree physiology, high-efficiency orchard architecture, mechanization, pollination, and environmental control of fruit quality—mostly for sweet cherries.

“I do find myself drawn to the more acidic cherry cultivars,” Whiting says, such as the firm, strongly flavored, mahogany Cowiche, developed at WSU’s Irrigated Agriculture Research and Extension Center in Prosser and released in 2007. “It’s a huge piece of fruit, high in sugar, very juicy, and very acidic. It’s just fantastic,” Whiting says.

“Another one of my favorites is Kiona,” also a large, dark sweet cherry developed at WSU. The problem is finding them at the grocery store. Unlike apples, which are marketed by their distinctive varieties, “there are some 20 to 30 cherry varieties that get marketed as dark sweet cherries,” Whiting says. “Depending on the time of the season, you’re going to see totally different cultivars with completely different flavors and textures. I think it’s a problem for the cherry industry. It leads to customer confusion. It’s like selling Granny Smith one week and Fuji another week under the same name.”

Nevertheless, sweet cherries dominate Washington state’s stone fruit crop, covering about 40,000 acres. In fact, Washington state is the country’s top sweet cherry producer, followed by California and Oregon. But sweet cherries, which rank among Washington state’s top 10 crops, are the exception. The rest of the state’s stone fruit crop, Whiting says, “is really small, even shrinking, because there’s so much volume coming from California.”

California leads the country’s peach, plum, nectarine, and apricot production, which overall are all experiencing dips. At WSU, “our work reflects the industry,” Whiting says. “So our stone fruit research focuses on sweet cherries.”

Still, he did some work on peach rootstalks earlier in the 2000s to help growers transition to higher-density orchards and more efficient production systems. “When you don’t have size-controlling rootstalks, you deal with larger trees. You have to plant them farther apart, and the canopies are harder to control. They require ladders for harvest, which, in general, is much more challenging with larger, low-density trees.”

All stone fruit is relatively thin-skinned, bruising easily. That’s another challenge. “The harvesting process is delicate. So is sorting and packing. You have to pay more attention than apples, pears, even cherries,” Whiting says.

Some Washington growers are finding a profitable niche by going organic. “Our
climate is well suited for organic stone fruits,” Whiting says. “Climate-wise, Washington has an advantage over California. We do have challenges with spring frost and winter cold damage. Stone fruits tend to be more susceptible. That’s why apricots are not really grown in Washington any longer. But if you can get through the spring frost, our milder summers produce better, high-quality, beautiful stone fruits.”

Apricots are problematic because they bloom as early as February or March, when cold weather can prevent effective pollination and frost damages flowers or young fruit. Per McCord, who leads WSU’s stone fruit breeding and genetics program, is making some apricot crosses, but the work is still in its early stages. He’s also running a small variety trial for peaches and nectarines in western Washington to see how they adapt to the cooler marine climate. But his focus is developing new varieties of sweet cherries.

There are two kinds of stone fruits: freestone and clingstone. The flesh of freestone fruit separates easily from the pit. The flesh of clingstone fruit clings stubbornly to the pit. They’re ready to eat when they are soft, succulent, and juicy—not squishy—and smell fruity and floral. Their aromatics are intoxicating, particularly peaches and nectarines.

Low in calories and high in dietary fiber, stone fruits are rich in antioxidants, potassium, and vitamins, especially C. Botanically known as drupes, they are perfect for fresh eating, perhaps paired with vanilla whipped cream or homemade ice cream. Chop them up and mix them into salads. Use them to top summer salads, morning cereal, pancakes, waffles, or crepes. Cook them into compotes, jams, or preserves. Blend them into smoothies. Bake them into upside-down cakes. Drizzle grilled peaches or nectarines with balsamic glaze and serve them with pork chops. Make cherry clafoutis or a stone fruit trifle or a rustic galette. The options are almost endless.

All of Washington’s stone fruit is prized for its sweetness and flavor balance, which the Washington State Fruit Commission credits to the region’s unique microclimates and ancient volcanic soils. Fruit that ripens on the tree builds sugar content, making the fruit that much sweeter and flavorful.

“People expect high-quality stone fruit from Washington growers,” says McCord, who recommends shopping for stone fruits at farmers markets. His favorite? “It’s a toss-up between cherries and peaches. My favorite way to eat them would be fresh. For apricots, I like them dried and also canned. I’m also a fan of pie.” *

Common kinds of stone fruit

**Apricots**—These sweet, firm, yellow-orange golf-ball-sized stone fruits have a tart finish and less of a floral flavor than peaches.

**Cherries**—From yellow-pink Rainiers to deep-red Bings, these small, heart-shaped stone fruits come in two kinds: sweet or tart. Sweet cherries are best for fresh eating. The most well-known tart cherry, the mouth-puckering Montmorency, is perfect for pie.

**Peaches**—Yellow-fleshed peaches generally have higher acidity and are better for cooking than mild, white-fleshed peaches. Donut or Saturn peaches—flat, small, mild—are best for fresh eating. All sport a velvety-soft fuzzy skin.

**Nectarines**—Think of them as fuzz-free peaches. Smooth-skinned nectarines have golden or white flesh and a bright, almost lemony flavor. Just like peaches, the yellow ones are a touch more tart.

**Plums**—From golden yellow and orange to reddish pink and deep purple, plums come in many varieties.

**Hybrids**—These include pluots, plumcots, and apriams, which, Whiting says, “have a role in Washington state’s stone fruit industry, but it’s a very minor one.”
WSU researchers look for ways to help people live better as they grow older.
Aging made easier

BY ADDY HATCH

Aging is not one-size-fits-all. How you age is determined by your genetics, your resources, your lifestyle, and, let’s face it, your luck.

With all those variables, most of us can’t expect to age perfectly. But we can age optimally.

Optimal aging means living the best quality life possible given your circumstances, which might include chronic illness, physical limitation, or cognitive decline. Researchers at Washington State University are working on multiple fronts to ease the effect of such limitations on the lives of older adults.

“Most of us are going to need more support as we age, so we’re looking at how we build in those support structures. We don’t want to make people feel they’re a burden for growing older,” says Cory Bolkan, a professor in the Department of Human Development at WSU Vancouver and codirector of the GATHER Lab (Generating Aging & Translational Health Equity Research).

People often assume technology is the golden ticket to optimal aging, and that might be a solution for some. In-home sensors and smartwatch-type wearables, for example, have been studied extensively by WSU research teams. But technology might not work for someone who wants to grow older in their rural home, or who bristles at the privacy implications of continuous monitoring.

Housing for older people, where it’s located and how that affects health status, is critical. WSU researchers have studied the built environment to see how signage, materials, and systems like thermostats contribute to optimal aging. WSU’s Granger Cobb Institute for Senior Living prepares students to manage a spectrum of senior housing options.

WSU teams are also studying ways to enhance brain health [see page 27]. And across programs and colleges, WSU is working to build the workforce of the future that will serve older people.

POPULATION IS AGING FAST

Optimal aging isn’t a theoretical exercise; the population of the United States is older than it has ever been in the past. In 2022, 17.3 percent of Americans were 65 or older. By 2050, that share is expected to reach 23 percent, or another 24 million people.

About two-thirds of those people want to grow older at home, called aging in place. Doing that will almost assuredly require support, though, and most people haven’t thought through what they’ll need or how they’ll get it, Bolkan says.

A 2022 study led by Bolkan and published in the Journal of Elder Policy found most people don’t think they’ll have future medical or other needs. But that’s not what the data shows, she says. About 95 percent of older adults have at least one chronic condition, and 80 percent have at least two. They may need help with yard work, house cleaning and repair, assistive devices, or accessibility changes.

“Many have very loose plans,” Bolkan says about the people interviewed as part of the study. “They say, ‘Oh, my daughter will do it for me,’ but they’ve probably never had a conversation with their daughter and the daughter has no idea.”

Bolkan and coauthor Raven Weaver, an associate professor in the Department of Human Development, both say a little-known resource in optimal aging is the network of Area Agencies on Aging. These are private or public nonprofits located across the nation that connect people with services to help them age in the place of their choosing. Their services are usually free, and programs are federally funded under the Older Americans Act.

“They’re one of the most underutilized, hidden gems of the aging services network,” says Weaver.

EMOTIONAL HEALTH IS AS IMPORTANT AS PHYSICAL HEALTH

One established fact in optimal aging is that human connection has a powerful effect on health. Studies at WSU and elsewhere have demonstrated links between social isolation and depression and disease.
The human connection even showed up in a study about smart-home sensors, and how they can help people maintain independence. Roschelle Fritz, a longtime associate professor in the WSU College of Nursing, says the study was successful: the sensors detected changes in patterns that were relevant to a person’s overall health, such as using the bathroom more often or not leaving the house for days.

But participants were most grateful for another aspect of the study: access to a nurse. Study participants talked to a nurse once a week or more, and nearly all of them wanted the study to continue for that reason.

“It was clear that ability to talk to a nurse was very meaningful to them,” says Fritz, who recently joined the University of California, Davis, to work on a project targeting healthy aging in a digital world.

Rural areas offer another kind of human connection. The networks of informal caregivers or community relationships are an underappreciated part of rural life for older adults, Weaver says. Those relationships are balanced against perceived rural deficits like a lack of health care services or access to technology.

When it comes to optimal health, people need support for their physical and functional health plus their emotional and spiritual health, Fritz says. “Loneliness is a big deal,” she says, “and there is a lot of it.”

LIVING SPACE MATTERS

Housing makes a big difference in optimal aging. A house with stairs? A retirement community? An urban area with few trees? All can have profound effects on mental and physical health.

Solmaz Amiri, a research assistant professor at WSU, led a study published earlier this year that shows a connection between living near nature and better physical and mental health among older adults. Even a 10 percent increase in nearby forest space, trees, water, or trails was associated with better health. Amiri says other studies have shown the reverse, that not having access to green spaces might bring a higher risk of health problems.

Researchers at WSU’s Integrated Design & Construction Laboratory have interviewed older people about how easy or difficult it is to function inside a home. Someone whose vision is impaired because of macular degeneration or glaucoma, for example, might have a difficult time seeing things on a speckled countertop. And digital controls were challenging to study participants, no matter how sophisticated or basic those controls were, says Shelby Ruiz, research project manager for the lab. Participants talked about signage, lighting, and storage height, and the frustrations that come with all of those.

“Can we build better buildings for and with the people who are going to be in them?” Ruiz says. “I think the answer is yes, but it takes some careful consideration and actually listening to these folks.”

START BY THINKING ABOUT THE FUTURE

Changes like how a building is built, or planting trees in a neighborhood, or whether a patient gets to interact with a nurse, are based on policies. But policies don’t always take the needs of older people into account, says Bolkan.

“As a society we tend to devalue aging and older people, and ageism is a huge problem,” she says. That also shows up in shortages of health care providers and other workers who serve older populations. Those shortages are expected to get worse, not better.

There are no quick fixes as a society. But as an individual, there is a place to start, and that’s by acknowledging and embracing aging, and planning for it.

Says Bolkan, “If you’re going to age in place, you need to prepare for that. When you buy your home, is that a home you can live in for the next 30 to 40 years? Are there too many stairs? Is there a bathroom on the first floor? Are you thinking about how accessible it is?”

“If you can get people to imagine their future selves, they make better choices.”
Pills and more pills: Taking medications doesn’t need to be so stressful

BY LARRY CLARK

Whether they use a box, a smartphone app, or simple notes, people who take several medications have to keep them all straight.

Multiple medications are often necessary for older patients. More than half of adults 65 and older report taking four or more prescription drugs, according to the Kaiser Family Foundation.

But the more medications a person requires, the more chances of problems—even hospitalization because of adverse drug events or not adhering to a prescription.

“As people get older, they tend to have more medical conditions, which may require more medications,” says Brian Gates (‘99 PharmD), a professor of pharmacotherapy at Washington State University College of Pharmacy and Pharmaceutical Sciences (CPPS) and a board-certified geriatric pharmacist.

One of the riskiest times is the transition from hospital to home care. In a 2009 WSU study, almost 90 percent of patients receiving home health care services from a Medicare-certified home health care agency experienced at least one medication discrepancy in that transition.

Pharmacists are ideally suited to identify, prevent, and resolve medication-related problems during transitions of care. They leverage in-depth knowledge of medications and the effects on the body to work closely with older people.

“One problem is that some patients go back to whatever meds they were taking before they went to the hospital. The pharmacist in home health helps identify those situations and alert patients and other clinicians to prevent adverse effects,” says Jeffrey Clark (’09 PharmD), an associate professor in CPPS. He is also board-certified in geriatrics.

Whether you are aging in place, transitioning back home, or receiving care at a facility, your pharmacist—and especially a senior care pharmacist—can help with medication evaluation for older patients or family members who help them. You can find a senior care pharmacist through the American Society of Consultant Pharmacist’s website.

For example, Providence Visiting Nurses Association (VNA) Home Health in Spokane Valley has utilized consultant pharmacists as part of the home health care team for almost 30 years. WSU faculty, resident pharmacists, and students from CPPS perform medication reviews, assess patients in the home, and collaborate with other providers to improve patient outcomes.

Gates and Clark both work as consultant pharmacists with Providence VNA and have measured the effectiveness of pharmacists on the health care team. That includes significant reductions in hospitalization from adverse medication events.

A recent quality improvement project identified that patients at high risk for hospitalization, who also had two or more medication discrepancies when starting home health care, were about two times as likely to be hospitalized within 30 days. As part of an interdisciplinary team, Gates and Clark took steps to improve medication reconciliation and evaluation that resulted in reduced hospitalizations.

Technology like medication management apps, smart pill dispensers, and telehealth can improve monitoring and support. However, communication between the patient and pharmacist
is still crucial, and sometimes lost with new technology or mail delivery, Clark says.

Education is key, since pharmacists help patients understand the purpose of their medications, which medications are most effective, how to take them safely, and potential side effects, Gates says. If a person has many medications, there can be real difficulty in understanding health information. Cognitive impairment can also affect a patient’s ability to effectively manage and take all their medications.

“Pharmacists can help you, as a patient, understand what meds are doing for you, and the individual risks and benefits of each one,” Clark says. “By working with providers, we can also help determine which ones are no longer necessary.”

Wear and share: Wearable tech steps up the health-monitoring game

BY ALYSEN BOSTON

Smartwatches and rings, activity trackers, and other wearable technology are convenient tools for tracking our daily habits, like how well we slept, how far we jogged, and even our heart rates and stress levels.

Wearables help us maintain and monitor our health without having to rely on memory to recall how many days we exercised last week. This makes it easier to keep track of our habits, which is even more crucial as we age.

But Ganapati Bhat, assistant professor in Washington State University’s School of Electrical Engineering and Computer Science, wants to see wearable technology track more than just steps. Bhat and his team are researching ways to make lightweight and flexible devices that can accurately monitor diseases like Parkinson’s.

“Watches and rings give good metrics, but may not be optimal for some diseases,” Bhat says. “In Parkinson’s, we want to closely monitor how the person is walking. Are they bending their knees enough? Is their gait getting slower? To do that, we need something small, lightweight, and without a large battery.”

Hang Liu, an associate professor in the Department of Apparel, Merchandising, Design and Textiles at WSU, and her team might be able to deliver just that. In December, they announced

INSET PHOTOS (FROM LEFT): BRIAN GATES, JEFFREY CLARK (COURTESY WSU PHARMACY AND PHARMACEUTICAL SCIENCES)
the development of a fiber that blends cotton and electricity-conducting polymer.

“The material is woven into the fabric, so you can wash it like other clothes and you won’t feel the difference,” Liu says.

The fiber could be used to collect data on vital signs and movement for the user or their doctor to review later, making it a useful tool for health monitoring, exercise, or even in uniforms for workers handling hazardous materials. It’s comfortable, too.

“A lot of care depends on the recall of the patient, and there is researcher bias, too,” Bhat says. “If we have sensors that are monitoring their symptoms on a real-time basis, then they have more frequent and detailed data to show to a doctor at their visit.”

And if Bhat and his team can develop a lightweight device with a long-lasting battery, it could make it easier for patients to use the device longer.

“Glucose monitors, for example, are patches that monitor glucose levels every few hours. They last a few weeks, but they can only do so much with such a small battery,” Bhat says. “After a while, some people stop using them because they have to be charged or replaced, and that can be annoying.”

So Bhat and his team are researching ways to harvest energy through light and motion to keep these devices working longer. The more comfortable and convenient they are, the better, Liu says. That’s a real boon for older patients.

“People wear clothes every day,” Liu says. “If we can build everything into the apparel, then you don’t have to remember to wear accessories or to take your phone with you.”

Healthy lifestyles protect brains and lower dementia risk

BY BECKY KRAMER

Almost 10 percent of US adults 65 and older have dementia, and its pervasiveness is a growing public health crisis.

Beyond the challenge of finding enough caregivers, dementia’s costs include the loss of dignity and independence for people living with cognitive decline and the financial and emotional toll on their families.

But current research also offers hopeful news. Although our brains change as we get older, dementia isn’t an inevitable part of aging. By adopting healthy lifestyle habits, people can significantly reduce their risk of developing dementia, says Maureen Schmitter-Edgecombe, Regents and H. L. Eastlick Distinguished Professor at Washington State University’s Department of Psychology.

Healthy habits foster something researchers call “cognitive reserve,” Schmitter-Edgecombe says.

“If you’ve been doing good things for your brain such as exercising, staying connected socially, or increasing your level of education, your brain is able to work more efficiently and that strengthens its resistance to cognitive decline,” she says.

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Healthy habits foster something researchers call “cognitive reserve,” Schmitter-Edgecombe says.

“If you’ve been doing good things for your brain such as exercising, staying connected socially, or increasing your level of education, your brain is able to work more efficiently and that strengthens its resistance to cognitive decline,” she says.

So Bhat and his team are researching ways to harvest energy through light and motion to keep these devices working longer. The more comfortable and convenient they are, the better, Liu says. That’s a real boon for older patients.

“People wear clothes every day,” Liu says. “If we can build everything into the apparel, then you don’t have to remember to wear accessories or to take your phone with you.”
Why should everyone be concerned about brain health?
Evidence suggests that about 40 percent of all dementia cases worldwide are related to modifiable risk factors. These are things like not getting enough exercise; uncontrolled diabetes or high blood pressure; poor nutrition; smoking; and excessive alcohol consumption. [see sidebar for full list]

If we can address these modifiable risk factors, we can significantly reduce the risk of people developing dementia. Drug therapies have not been particularly successful in treating Alzheimer’s disease or other dementias. Some may only slow it down for a limited amount of time, and drug therapies are all very expensive.

If we can get people to understand the importance of healthy living for a healthy brain and their future cognition, we will help people live independently for longer periods of time.

What’s the best age to start developing healthy brain habits?
I tell people it’s never too early to start engaging in activities for brain health, nor is it ever too late. The research now shows the importance of thinking of brain health as a lifelong process. Education is one of the modifiable risk factors, and that’s important beginning at a young age. And for issues like uncontrolled diabetes or hypertension, the pathology associated with cognitive decline occurs in middle age.

In our interventions, our goal is to meet people where they are. We want to help them learn about brain health and make small changes through realistic goals that can be integrated into their everyday routines. Perhaps someone says, “I’m consuming too much salt,” or “I’m not getting the recommended amount of exercise.” Can they start by eating one meal without salt each day, or taking the stairs instead of the elevator? When a healthy habit becomes part of their routine, we encourage them to identify their next goal.

Why is physical exercise so important?
What is good for the heart is good for the brain. Regular aerobic exercise is associated with better cognition and larger volumes in the brain’s hippocampus, which is important for memory consolidation. In people with Alzheimer’s disease, abnormal clusters of protein fragments called “plaques” build up between nerve cells in the brain, and dead and dying nerve cells in the brain develop tangles.

That makes it difficult to learn new information or consolidate new memories. People can remember things from their distant past but might repeat a question they asked five minutes ago. That new information didn’t get laid down in a memory.

Exercise also improves your mood and decreases cognitive decline. For healthy brain aging, the recommendation is 150 minutes per week of moderate to high-intensity exercise.

Read the full Q&A at magazine.wsu.edu/extra/brain-aging.

12 MODIFIABLE RISK FACTORS FOR DEMENTIA
Less education, hypertension, hearing impairment, smoking, obesity, depression, physical inactivity, diabetes, low social contact, excessive alcohol consumption, traumatic brain injury, and air pollution.


Are you over 50? You may be eligible to participate in a WSU-led memory and aging study and receive a free baseline cognitive assessment. Learn more at labs.wsu.edu/neuropsychology-aging/participate
Journalism close to home

BY ADRIANA JANOVICH

She landed an internship, then a full-time reporting job at the Seattle Times right out of college. DAISY ZAVALA MAGAÑA ('21 Comm.) was half a state away from home, covering breaking news in the big city, when work began wearing on her. She felt disconnected. “Eventually I decided that I needed to pursue something else,” she says. “It really came down to why I got into journalism, and it wasn’t to work at a certain publication or to work in a certain place.”

Zavala Magaña left Washington state’s largest newspaper for the much smaller Nogales International, an English and Spanish newspaper based in the border town of Nogales, Arizona, where she covers border issues and local news. The weekly community publication allows her more time to focus on the kinds of stories she wants to tell. “What interests me the most are these underrepresented stories about immigration and labor rights and those intersections,” says Zavala Magaña, who spoke on two panels at Washington State University’s 2024 Murrow Symposium organized by the Edward R. Murrow College of Communication. The theme: “Illuminate! The Power of Untold Stories.”

Zavala Magaña, the oldest of four and a first-generation college student, found Murrow College during her sophomore year, switching majors from anthropology to journalism and political science. She grew up in Wenatchee, where her parents—originally from neighboring ranches in rural Michoacán, Mexico, without access to education beyond elementary school—were farmworkers. They followed tree fruit crops from California to Washington, where they eventually settled. “I grew up speaking Spanish in the home. It’s my first language,” Zavala Magaña says. “All of the traditions of the culture they kept—the food, the holidays, other traditions. I grew up in a community where you very much help your neighbor no matter what. That was the dynamic I was used to.”

Leaving that close-knit environment for college felt scary. “I had no idea how to navigate it,” says Zavala Magaña, who first visited WSU through a trip organized by Movimiento Estudiantil Chicano de Aztlan, or MEChA. But “because I knew there was support through that student group, I felt like WSU was somewhere I could see myself and thrive away from home.”

She chose anthropology because “I enjoyed public service, and I liked meeting people.” A media and society class piqued her interest in the power of the press,
especially in helping readers understand under-represented communities. “That stuck with me,” she says. “I kept thinking about that and decided to apply to the student newspaper.”

She twice participated in the Rural Reporting Project, in which WSU students experiment with community-guided rural reporting and ways to improve rural news coverage.

“What’s really great about the Murrow program is there’s an emphasis on multimedia journalism and building skills beyond writing,” Zavala Magaña says. “That was very helpful because we work in a very fast-paced landscape. Journalism isn’t what it was 10 years ago or even five years ago.”

One of her professors, Ben Shors, chair of the Department of Journalism and Media Production, encouraged her to apply for an internship in Olympia with the Spokesman-Review, reporting on the legislature. After the spring internship, the Spokane newspaper offered her a summer internship on the city desk. She then freelanced for the newspaper and other publications through her senior year.

Those cumulative experiences helped her land an internship at the Seattle Times after graduation. That internship turned into a temporary job, then a full-time breaking news job, covering the 2 to 10 p.m. shift.

“It was really tough because, at the same time, I was trying to write stories that delved into labor rights and the Latino community. But I was working odd hours. It messed up your system and your mental health,” Zavala Magaña says. “You’re dealing with real people and real tragedy. It’s really hard to churn that out on a daily basis. I’m asking a mother to tell me about her dead child and hoping that humanizes the person or the problem, but it might not. Sometimes, it felt like gawking at heavy tragedy. It started to feel like I didn’t have enough space for my own grief. It started to pile up.”

Zavala Magaña was at the Seattle Times from June 2021 to August 2023. That fall, she moved to the US-Mexico border. “It was a drastic change,” she says. “I do miss my family. But this community feels like home. It makes me feel like I get to exist as a Mexican American and am not made to feel like one or the other.”

Nogales International covers Santa Cruz County and Nogales County as well as the neighboring Mexican city sharing its name. “Our focus is on community-centric stories and hyperlocal news that goes beyond the usual narratives you see for a region that has become highly politicized nationally and elsewhere in Arizona,” Zavala Magaña says. “Being bilingual and having the ability to do those interviews in a way that flows and feels comfortable makes such a difference.

“I feel like I am prioritizing journalism the way I think it should be, and that’s community-oriented with heart. At the end of the day, I feel good about my choice.”

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**Truckin’ in retirement**

**BY WENDA REED**

“Equity issues,” “expanding access,” and “institutional performance” dominated DAVID LONGANECKER’s (’68 Socio.) 45-year career in higher education policy. His goal: “All individuals get a shot at higher education.”

At 70, he retired, went back to school to earn his commercial trucking license, and learned some new terms. “Glad hands” are interconnected hoses. A “refer” is a refrigerated truck. A “lumper” loads the trailer with cargo. His goal in the training period: “Back the damn truck.”

Longanecker mastered that skill along with a 181-item pre-driving equipment checklist, parallel parking in an alley, double-clutch shifting, and gradual braking.

“I’ve loved big trucks for as long as I can remember,” he says. Growing up in Chelan, he relished stories of his father’s and uncle’s trips in an 18-wheeler. Later, he loved riding in the cabs of semitrucks when he hitchhiked to Wenatchee Valley College and Washington State University.

But first came his professional career. “I was active in student government at WSU, and I worked with some of the college administrators. I thought that was something I’d like to get into,” he says.

After a stint in Vietnam, Longanecker earned a master’s in education from George Washington University, then worked there for three years.

As he was earning a doctoral degree in administration and policy analysis with an emphasis on higher education at Stanford University, he was recruited by the Congressional Budget Office to work as the principal analyst for higher education. It isn’t a dry academic topic to Longanecker. He is a first-generation college graduate, although he does not see himself as disadvantaged. “But I saw kids I went to high school with who didn’t get the opportunities to go to college, although they were smart,” he says.

He became a higher education executive officer in Colorado, where he lives now, and Minnesota. “It’s at the state level that the decisions are made to keep tuition low, but we also must consider other expenses, such as books and housing, which can really impact a student,” Longanecker says.

The desire to increase student aid dovetailed with a priority of President Bill Clinton. Longanecker was tapped to work on student loan programs as assistant secretary for post-secondary education in the US Department of Education during the Clinton administration.

He spent the last 17 years of his career with the Western Interstate Commission for Higher Education. His constant question was: How can you change your policies to give more students “access to success”? 
Longanecker was successful in completing his own community college training to drive a truck, but finding a job with a trucking company was harder. “Apparently, a 70-year-old rookie didn’t fit well into their respective wheelhouses,” he notes.

However, Swift Transportation, America’s largest trucking company, accepted him into its training program for novice drivers. Over five weeks, Longanecker and his mentor drove more than 5,000 miles through 25 states. They trucked meat to Wisconsin, milk to Chicago, cheese to Oklahoma, hamburger patties to Arizona, soap to Salt Lake City, and yogurt to Los Angeles. Longanecker learned to drive at night, in snow, on ice, and through thick fog.

He was thrilled when Swift assigned him his own truck. “It was everything I hoped it would be,” he says. “Once you master the task, the shifting of gears actually allows you to essentially commune with your truck. It’s just plain fun,” he writes in his book, The Late Truck Driver. “And the vistas are amazing.” His wife, Mary Jane (’68 Socio.), went along for the last few weeks.

“As much as I was loving it, I was never home,” he adds. In five months of driving for Swift, he had six days off. “I missed Christmas, New Year’s, my birthday...”

So he started his own trucking business, buying a 2013 International ProStar and a 2009 Utility trailer. He drove when he wanted to for the next 15 months. “It’s easy to get jobs,” he says. “Uber has a truck service; you sign up to carry loads by contract.” Getting to know the culture of truck driving was also “a marvelous part of the experience.”

After a couple of years of driving, he left his second career to spend more time playing golf, volunteering, and being with his wife, three daughters, and five grandchildren. Seeing many serious accidents in a blizzard and having his trailer break down also nudged him in that direction.

As he traveled, he wrote emails to friends, and they suggested he write a book, The Late Truck Driver: Following the Dream (Archway Publishing) came out in 2021. It’s a chronicle of “how wonderful truck driving can be, out on the road in that massive piece of equipment, humming along.”

Lasting impacts

BY ADDY HATCH

Two women whose actions and advocacy have made a lasting impact within and beyond the borders of the state received honorary doctoral degrees from Washington State University.

Carla Peperzak risked her life helping Jews during Nazi occupation of the Netherlands. Patricia Whitefoot is a lifelong champion of Native American culture and advocate for Indigenous women. The pair were honored this spring after unanimous approval by the WSU Board of Regents.

Each year, members of the WSU community nominate candidates who are considered by the Honorary Doctoral Degree Committee. Just 21 people have received honorary doctorates from WSU, with the most recent being emeritus professors William Lipe and Ralph Yount in 2021.

CARLA PEPERZAK
The daughter of a Jewish father and a Catholic mother raised by a Jewish family, Peperzak was in high school when the Nazis invaded the Netherlands. Patricia Whitefoot is a lifelong champion of Native American culture and advocate for Indigenous women. The pair were honored this spring after unanimous approval by the WSU Board of Regents.

Carla Peperzak kept her work as a Dutch resistance operative a secret for more than five decades, but has spent much of her time in recent years sharing her experiences in classrooms across Washington. She talks with WSU students enrolled in a World War II history class taught by associate professor Raymond Sun, who nominated Peperzak for the award.

“Carla Peperzak’s unfathomable courage, lifelong determination and continuing generosity make her a role model and inspiration for our faculty, staff, students, and beyond, exemplifying the mission and strategic plan of Washington State University,” former co-provost Erica Weintraub Austin, who chairs the honorary doctorate committee, told regents in January.

PATRICIA WHITEFOOT
For more than five decades, Whitefoot, a citizen of the Confederated Tribes and Bands of the Yakama Nation and Native Elder, has served as a visionary leader, advocate, teacher, and mentor for cultural preservation, tribal sovereignty, education, health, and human justice rights of Native peoples. Among those who have benefited from Whitefoot’s mentorship is her nominator, Zoe Higheagle Strong, vice provost
A life of saving animals

BY JOSH BABCOCK ’15

JANE WARDROP (’76 DVM, ’84 MS Vet. Sci.) didn’t pay much attention to the fact that veterinary medicine was a male-dominated profession when she applied to veterinary school at Washington State University in 1972.

Keeping pace with her childhood dream, she was more concerned about the quality of her work and the animals she cared for than what anyone else thought about her gender.

“I knew what I wanted to do; I just didn’t think anything was going to stop me,” Wardrop says.

Jane Wardrop with a canine client. Photo Ted S. Warren/College of Veterinary Medicine

“A life of saving animals

BY JOSH BABCOCK ’15

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“I knew what I wanted to do; I just didn’t think anything was going to stop me,” Wardrop says.

Five decades later, many women have followed in Wardrop’s footsteps to change the gender dynamics of the veterinary profession. Two-thirds of licensed veterinarians in the United States are now female, and Wardrop played an integral role in many of their careers.

A professor in her fortieth year at her alma mater, Wardrop has educated thousands of veterinarians and, for 27 years, directed the Clinical Pathology laboratory at WSU’s Veterinary Teaching Hospital. She is also credited with starting WSU’s veterinary Blood Bank and Transfusion Medicine program in 1989. Blood from the program’s volunteer canine and feline donors saves an estimated 100 animals each year.

Looking back, Wardrop considers the bank, which has served as a successful model for other blood banks at veterinary clinics around the nation, her greatest career accomplishment.

“Patients that were going to die didn’t,” Wardrop says. “It saves lives. We could not do the sophisticated surgeries we do here without blood transfusions. We couldn’t keep half of these animals in the ICU alive without transfusions. Once you’re without blood, you discover how badly you need it.”

Wardrop leaves a mark on the veterinary field as a whole, too. Her early research into red blood cell collection and storage was critical to determining the 35-day shelf life of donated blood in dogs, which remains the standard today.

“We were the first group really to identify the time span that you could use for canine red blood cells,” Wardrop says.

In recent years, the blood bank has grown to include four time-slip students and two part-time staff for blood collection and processing, as well as Jillian Haines (’99 DVM), a former student who will direct the bank as Wardrop retires this fall.

But for much of the blood bank’s existence, Wardrop alone recruited blood donors, processed blood, and tracked blood inventory for patients she would help save but often never meet.

Wardrop attributes her love for animals to her father, a lifelong commercial fisherman, and her passion for medicine to her mother, a nurse. Her unwavering work ethic was fueled by her hardworking parents and the loss of her mother and grandmother two months apart when she was just 14, the same age she was when she took her first job at Ebright Animal Hospital in her hometown of Bellingham.

Throughout her schooling and her 40-year career at WSU, Wardrop has taken that same initiative in everything she does, and she’s found joy doing it.

“I feel very lucky I found what I wanted early in life and discovered an aspect of veterinary medicine I adore,” she says. “I think that’s all people want out of what they do. If they feel they can make a difference, it gives you purpose, and that’s where happiness comes from, right?”

Jane Wardrop with a canine client. Photo Ted S. Warren/College of Veterinary Medicine
Leaning on Air
CHERYL GREY BOSTROM ’80 MA
ENGLISH
TYNDALE HOUSE PUBLISHERS: 2024

Twelve years have passed since Celia has seen Burnaby. She immediately notes how much the quiet, bone-hunting boy has changed. He has his doctorate now, along with a more refined set of social skills, and is about to start his career as a professor of veterinary medicine at Washington State University. She has her doctorate, too. Her specialty: birds.

Celia agrees to road-trip with Burnaby from rural Whatcom County, where they met as teens in 1985 in Cheryl Grey (Hobson) Bostrom’s 2021 debut novel Sugar Birds, to WSU and the rolling hills of the Palouse. Most of the story takes place in this landscape, and Bostrom’s lyrical descriptions of it will resonate with those familiar with Pullman and its environs. It might even make them nostalgic for it.

Leaning on Air is told from multiple perspectives—mostly those of Celia and Burnaby, but also from his little sister, Agate or “Aggie,” a wildlife photographer, makes a brief but important appearance in this volume, too.

Leaning on Air is a captivating story of spirituality and science, wind and wildfire, hardship and harvest, and the meaning of marriage. At its heart, it’s a love story. Expect exquisite writing, romance, mystery, tragedy, healing, and threads of Christian contemplation.

Bostrom plays with time, too, opening her story in 1997, then skipping ahead to 2008, when Celia is 39 and a professor at the University of Idaho. In between, readers encounter the pain of three generations of women, family secrets, loss, and, most of all, hope.

— Adriana Janovich

Clean Food, Messy Life: A food lover’s conscious journey back to self
JAMIE TRUPPI ’00 LIBERAL ARTS
2022

Nutritionist Jamie Truppi offers her marriage on a platter in this self-published food memoir. Her story, presented through different dishes, centers around her complicated relationship with and passion for food—from her early dating life through divorce.

Truppi’s fixation with ingredients challenges not only her way of thinking but her closest personal relationships. Her friends and family call her a “food snob.” She’s obsessed with what she eats. She’s also a wreck. These are things she freely and bravely admits, things for which she provides plenty of evidence. “Nutritionist moms with Type-A personalities (or maybe just me) have the potential to go off the deep end because, well, we analyze every single food decision. Every. Single. One,” she writes in Chapter 32: Recipe for Driving Everyone Nuts.

In her early twenties, she’s “a lonely rootless globetrotter from a severed middle-class family.” While her personal life is a mess, she focuses on what she can control: food. She learns “how complex it had become to keep simple meals ethical!” She calls natural food stores her “soul incarnate” and moves with her future husband to Portland, Oregon, where “food that met my standards was accessible all around me.” She becomes vegetarian, gives up dairy, goes vegan, eats at In-N-Out Burger, and bakes sourdough bread. Halfway through the book, she’s still asking, “What life path was I treading?”

The 41 chapters are recipes for feelings and moments: dreaming, decision-making, deliverance, desire, disagreements, dissolution. Each also ends with a culinary recipe: vegetarian Thai green curry and rice, vegan chocolate chip cookies, Swiss chard with cannellini beans and pancetta, triple chocolate brownies with peanut butter and sea salt.

Truppi’s voice is strong, self-deprecating, unapologetic, approachable, and sometimes irreverent. She’s an authentic, honest, and self-aware narrator as well as “the diet dictator. The food fanatic. The plate police.” She navigates the birth of her son, the death of her sister, the birth of her daughter, and the downward spiral of her marriage. Her journey is full of indignation and loss, as well as learning and personal growth.

— Adriana Janovich
BRIEFLY NOTED

The Lives of Butterflies: A Natural History of Our Planet’s Butterfly Life
DAVID G. JAMES AND DAVID J. LOHMAN
PRINCETON UNIVERSITY PRESS: 2024
This comprehensive, authoritative, and beautifully illustrated book by Washington State University entomologist David James describes the biology, ecology, and lives of butterflies around the world.

Indigenizing Archaeology: Putting Theory into Practice
EDITED BY EMILY VAN ALST AND CARLTON SHIELD CHIEF GOVER
UNIVERSITY PRESS OF FLORIDA: 2024
Early-career Indigenous scholars conducting research in North America are advancing archaeological study done with, by, and for members of Native-descendant communities. Van Alst, assistant professor of anthropology at WSU, and other contributors highlight examples of Indigenous methodologies and approaches to research.

The Good Little Mermaid’s Guide to Bedtime
EIJA SUMNER (’90 GEN. STU.) AND NICI GREGORY
TUNDRA: 2024
Don’t even think about telling this fierce and ferocious, spirited, and perhaps a bit stubborn little mermaid to go to bed. Sleep, as this whimsical under-the-sea children’s book declares, “is for guppies.” Sweet dreams—they’re “for garden eels.” Will the “scary” little mermaid ever settle down and catch some zzz’s?

Game Theory: An Introduction with Step-by-Step Examples
ANA ESPINOLA-ARREDONDO AND FELIX MUÑOZ-GARCIA
PALGRAVE MACMILLAN: 2023
WSU economists Ana Espinola-Arredondo and Felix Muñoz-Garcia provide a student-focused introductory textbook on game theory, which helps readers understand how people make choices while anticipating the decisions of others.

Four Anxious Armadillos
LAURI CRUVER CHERIAN ’86 ED., ILLUSTRATED BY MARIANELA MULLER
BOOKBABY: 2024
Nilda, a nine-banded armadillo, is on a quest to cure herself of anxiety in this children’s book that ventures through the wilds of Argentina. Along the way, Nilda and three armadillo friends face a jaguar, an anaconda, and more while practicing coping skills and just maybe teaching you some Spanish.

Living, Loving, and Laughing with Animals, The Adventures of a Country Veterinarian
RAYMOND “RAY” EDGER ’61 DVM
2023
Raymond “Ray” Ediger, who runs Green Spring Farm in Maryland, spent more than six decades as a veterinarian. His charming memoir is full of life lessons and humorous, heartwarming stories about animals, the octogenarian author’s own family, and his Oregon childhood.

In the Spaces between Us
YVONNE HIGGINS LEACH ’83
ENGLISH
KELSAY BOOKS: 2023
Yvonne Higgins Leach, who splits her time between Spokane and Vashon Island, writes lyrically about nature, neighbors, home, family, shelter dogs, wild animals, and the love and understanding found in in-between spaces. This exquisite collection of poems, her second full-length poetry book, is a finalist for the Sally Albiso Poetry Book Award and the Wandering Aengus Book Award.

The Bowels of Madness: A Journalist’s Manic, Delusionary Journey in California’s Mental Health System
STEVE DIDDY ’94 COMM.
PAGE PUBLISHING: 2023
KMPH-Fresno reporter and anchor Steve Diddy explores his own tumultuous battle with mental health professionals, antipsychotic medications, jail confinement, and psychiatric facilities in this irreverent memoir.

A Muckleshoot Poetry Anthology: At the Confluence of the Green and White Rivers
CURATED BY SUSAN LANDGRAF
WSU PRESS: 2024
This slim but compelling volume features the work of two artists and more than 50 poets of Indigenous heritage living on the Muckleshoot Indian Reservation near Auburn and writing about identity, loss, home, and family.

I, Albert Peabody: Confessions of a Serial Killer
JERRY P. SCHELLHAMMER ’87
ENGLISH
AUSTIN MACAULEY: 2023
Set in Spokane and Eastern State Hospital, this psychological thriller takes readers into the mind of an 85-year-old serial killer as he chronicles the calculated killings he’s committed over the course of decades.

Unique Eats and Eateries of Spokane
ADRIANA JANOVICH
REEDY PRESS: 2024
Explore more than 80 interesting and iconic restaurants—from Anthony’s at Spokane Falls to Zip’s Drive-In—with this lively and approachable guide to dining out in Spokane. Adriana Janovich served as the food editor at the Spokesman-Review in Spokane from 2013 to 2019 before joining the staff at Washington State Magazine as associate editor.
2024 Top Ten Seniors

They represent the highest standards of the college experience. In academics. In athletics. In the arts. In campus involvement and community service.

For more than 80 years, Washington State University has recognized 10 seniors from each graduating class. These students come from across all WSU campuses and embody the best of five areas of college life.

The WSU Alumni Association and Student Alumni Ambassadors oversee the program. A committee of faculty, staff, and students chooses two winners in each category based on criteria such as leadership activities and academic achievements.

Here are this year’s Top Ten Seniors:

**ACADEMICS**
Felicia Adesope (’24 Accounting, Mgmt. Info. Sys.) plans to go to grad school to continue studying management information systems.
Stevie Fawcett (’24 Spanish, Microbiol.) aims to become a physician scientist and plans to work toward his MD/PhD while studying cancer therapy strategies.

**ATHLETICS**
Preston Bebich (’24 Econ.), a four-year letter winner in men’s golf, dreams of competing in the PGA Tour Americas. Former captain of the women’s basketball team Charlisse Leger-Walker (’24 Busi.) plans to play professional basketball.

**CAMPUS INVOLVEMENT**
Reem Osman (’24 Comp. Sci.) is a software engineer whose favorite memories at WSU Tri-Cities were made at hackathons. Sidney Serna (’24 Digi. Tech. & Cult.) served as the president of the digital media club.

**COMMUNITY SERVICE**
Alexis Dunn (’24 Biol.) hopes to attend the WSU Elson S. Floyd College of Medicine. Zack Martian (’24 Const. Mgmt.) is a field engineer for a general contractor, working his way toward becoming a construction superintendent.

**VISUAL AND PERFORMING ARTS**
Logan Terry (’24 Music Ed.) loves Cougar Marching Band and hopes to become a college marching band director. Thomas Wieland (’24 Music, Int. Busi. & Finance) is pursuing a master’s degree in jazz studies.

Read longer profiles and watch videos of the 2024 Top Ten Seniors at wsu.edu/toptenseniors.
Cougar XI is here

In true Cougar Spirit, the latest release of the Cougar Collectors’ Series is a little extra special. We are pleased to present Cougar XI, the eleventh release in the Cougar Collectors’ Series.

Cougar XI is a limited-edition wine from the creative Cougs at WIT Cellars. You won’t want to miss it. Guarantee your bottle by joining Wine-By-Cougars, the official wine club for Cougs, before August 7.

Learn more at winebycougars.com.

Get your first taste of Cougar XI at the Release Party this summer, happening at the Prosser and Woodinville tasting room locations:

📅 Saturday, August 24, noon–5:00 p.m. Pacific

WIT Cellars (Prosser), 505 Cabernet Court, Prosser, WA 99350
WIT Cellars (Woodinville), 19501 144th Ave NE, Suite A-400, Woodinville, WA 98072

alumni.wsu.edu/CougarXI
The New England Patriots have a renovated football stadium, complete with new lighthouse, thanks to architect **ERIC WILLIAMS** (‘08 Arch. Studies and Const. Mgmt., MS ’09 Arch.).

Williams, an associate principal with the Populous Architecture Firm in Boston, led the $250 million renovation of Gillette Stadium, home of the NFL team. The renovation, which was completed in 2023, includes a new four-and-a-half acre plaza at the entrance to the stadium and to the welcoming 22-story lighthouse. Its 360-degree observation deck, the Lookout, offers year-round, panoramic views of the stadium and surrounding areas, including Boston and Providence skylines.

The renovation also includes the country’s largest curved radius videoboard, measuring 60 feet by 375 feet. Permanent bars and concession locations with checkout-free Zippin technology, an expanded Row of Honor viewing area for veterans, and a glass-enclosed field-level club space with view of the team tunnel were also added to the stadium.

Before the Patriots stadium work, Williams received his Master of Architecture II at the Harvard University Graduate School of Design. He was one of 12 students engaged in multi-year research of the Elements of Architecture exhibition for the Venice 2014 Architecture Biennale, and he later worked on editing the research material for inclusion in architect Rem Koolhaas’s book *The Elements of Architecture*.

**BY LARRY CLARK**
Niehl was born March 5, 1924, in Turtle Creek, Pennsylvania. He grew up in Burien and attended Highline High School, where he played varsity football and basketball. He was also a pole-vaulter on the track team. In 1945, his senior year, he quit high school after basketball season to enlist in the US Army.


Daughter-in-law Trish (Nagel) Niehl (’79, ’80 MA Speech & Hearing Sci.) grew up in Pullman, where her dad, the late Charles “Chas” W. Nagel, taught food science and viticulture. She reports that Niehl’s “mind is sharp, and he works out with Bob two days a week. Going strong at 100!”

BY ADRIANA JANOVICH
WSU College of Medicine’s Nutrition and Exercise Physiology department.

Devin Lewis (’99 Socio.) captains the Redmond Police Department. Lewis had served the Bend (Oregon) Police Department since 2004, most recently as a lieutenant. He started as an explorer for the Washington County Sheriff’s Office in 1994, later becoming a deputy with Deschutes County in 1999 before moving to Bend. As captain, Lewis works closely with the police chief to provide general oversight and management of department operations.

Kevin Van de Weghe (’02 Soc. Sci.) is leaving the Washington state legislature after 14 years of service when his term as a state senator ends in January. He is chair of the Agriculture, Water, Natural Resources and Parks Committee and is one of the legislature’s foremost authorities on rural issues. Heidi E. Cox Banse (’04 Vet. Med.,’07 DVM) will lead the first and only veterinary school in Arkansas. Banse was named dean of the forthcoming College of Veterinary Medicine at Arkansas State University. Previously, she was associate dean for education strategy at Louisiana State University School of Veterinary Medicine. She is a member of the American Association of Veterinary Medical Colleges Council on Outcomes-based Veterinary Education and Spectrum of Care Initiative. Her clinical research has focused on mechanisms of equine glandular gastric disease and endocrine disorders in horses.

Nicholas Sarpy (’07 Finance) is the chief financial officer for the city of Little Rock, Arkansas. Previously, he was the director of finance for Waco, Texas, and deputy finance director for Kansas City, Missouri.

Julian Reyes (’10, ’18 PhD Civ. Eng.) is climate adaptation program lead for the Bureau of Land Management. Previously, he was the assistant director for climate services for the White House Office of Science and Technology Policy and deputy director for services in the US Global Change Research Program.

Paddock Canned Cocktails, a company cofounded by Blake (Loos) Preston (’14 Wine Busi. Mgmt.), won a Double Gold medal at the San Francisco International Spirits Competition, outsourcing Absolut, Bacardi, Smirnoff, and other renowned producers. Preston and her husband, Cory, partnered with Nick Lee (’15 Digi. Tech. & Cult.) and Nick Robertson to form Paddock after the couple started canning cocktails while their Pullman bar, Etsi Bravo, was shut down during the COVID-19 pandemic.

Christopher Clarke (’20 PhD Econ.) was awarded the 2024 Oaks Academic Technology Award, sponsored by WSU Global Campus, for his innovative use of instructional videos he shares with students via YouTube and TikTok. He has produced more than 50 instructional videos and hundreds of short educational videos that have earned him more than 48,000 followers and millions of views on TikTok. Clarke is an assistant professor in the School of Economic Sciences.

Training Future Veterinarians

Stephanie Scoville (’24 DVM) from Hawaii is one of nearly 7,000 doctors of veterinary medicine to earn her degree from WSU in the last 125 years. She now works at a mixed-animal general practice in eastern Washington.

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IN memoriam


Do you know someone interested in a future in health care? A Doctor of Pharmacy degree could help them get there.

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DASH, the Washington State University Alumni Association’s “ambassadog” and the only canine member of the Mug Club at the legendary Pullman bar The Coug, has died. He was 13.

Dash and his human, ANDE EDLUND (’94 Hotel & Rest. Admin.) were Instagram-famous from their home base of Redmond to Pullman, where Dash enjoyed frolicking on the lawn in front of Bryan Hall, meeting WSU students and alumni, and posing in photos with his best buddy Butch T. Cougar. He especially loved gobbling tater tots at The Coug and visiting classes at the Edward R. Murrow College of Communication as a visiting “pawfessor.” The WSU College of Veterinary Medicine also awarded an honorary “dogtorate” degree.

“If you ever met Dash, you know how special he was. Whether you knew he was famous or not, Dash always lifted your spirits and made you smile. Thank you for loving him,” Edlund wrote the day after Dash died, announcing his passing on Instagram on April 30. In early May, WSU President Kirk Schulz and WSU First Lady Noel Schulz made “a generous gift” to the WSU College of Veterinary Medicine’s Pet Memorial Program Fund in Dash’s name.

Edlund got Dash as a pup in 2011 and created the dash.dog Instagram account in 2015. When a 2018 post of Dash holding a hot dog in his mouth during Bark in the Park Night at a Seattle Mariners game went viral and was featured on Good Morning America, Edlund saw an opportunity to use his pet’s celebrity status for public good.

The beloved golden retriever did social media account takeovers for the WSUAA and The Coug. Dash also directed attention and fund raising toward many worthy causes and organizations. For seven years, Dash produced his own wall calendar benefiting the Leukemia and Lymphoma Society. Dash rooted for the Cougs, Mariners, Seahawks, Storm, Sounders, and Kraken—but never for the Huskies.

While he had other social media accounts, Dash’s largest community—more than 65,800 followers when he crossed the Rainbow Bridge—was on Instagram. Posts were largely written in the dog’s voice. Dash’s accounts are still active, but these days fans see more of his protégé, Edlund’s younger golden retriever, Chase.

To Dash, after his passing, Edlund wrote on Instagram, “You had the sweetest smile, the happiest trot, the softest ears, and the floofiest tail. You were a goofball with the gentlest soul and I’ll miss holding your huge paws. You made me a better human. You were perfect.”

BY ADRIANA JANOVICH
March 5, 2024, Moses Lake. WILLIAM “BILL” EDWARD BOWE (’74 Agronomy), 71, February 18, 2024, Camano Island.


YSEDRO R. BICANDI (’75 Ani. Sci.), 75, October 1, 2023, Homedale, Idaho.

DOUGLAS G. DANIELSON (’75 Arch.), 72, February 16, 2024, Camas.


SCOTT LINDSAY NELSON (’76 Speech & Hearing Sci., Ed.), 70, April 9, 2024, Silverdale.

CHARLES S. L. POSTON (’76 PhD Psych.), 82, May 1, 2024, Bedford, Virginia.

JOHN W. LOTZGESELL (’78 Accounting), 69, April 4, 2024, Alexandria, Virginia.

TED ALAN DEERKOP (’80 Agro.), 65, October 31, 2023, Pullman.

DIERDRE FLIEDER (’92 Nursing), 69, February 5, 2024, Vancouver.

JEAN M. CHAPMAN (’93 History), 82, February 20, 2023, Pullman.

ANNE MARIE SCANLON (’83 Busi.), 62, February 21, 2024, Tiburon, California.

MICHELE J. WILLIAMS (’83 Comm.), 61, December 21, 2022, Seattle.


ABRAHAM GONZALEZ JR. (’84 Agro.), 61, November 27, 2022, Mount Vernon.

WILLIAM G. “BILLY” HARTER JR. (’84 Ag. Econ.), 62, April 1, 2024, Kahlutus.

DOUGLAS JOSEPH MCILRAITH (’85 History), March 24, 2024, Chiang Mai, Thailand.

ROY S. KAMISUGI (’89 Intl. Busi.), 58, August 6, 2023, Phoenix, Arizona.

DIERDRE FLIEDER (’92 Nursing), 69, February 5, 2024, Vancouver.

JEAN M. CHAPMAN (’93 History), 82, February 20, 2023, Pullman.

LEISA KAY SCHMIDT (’95 English), 52, February 22, 2024, Tacoma.

GRANT ALFRED NELSON (’96 Hotel & Rest. Admin.), 59, March 5, 2024, Olympia.

JEANNE MARIE PINGREY (’00 Soc. Sci.), 68, January 20, 2024, Chelan.

CHARLES GODFREY “CHARLIE” REED JR. (’01 Busi.), 46, May 3, 2024, Spokane.

CHRISTOPHER SAMPSON (’02 Crim. Jus.), 46, January 21, 2023, Bothell.

GARY JAY HALDORSON (’90 DVM, ’05 PhD Vet. Sci.), 60, March 19, 2024, Pullman.

KEITH BYRON BASSETT (’07 MBA), 50, August 8, 2021, Renton.

JOY KATHLEEN ZORNES (’09 History), 37, April 26, 2024, Oakesdale.


AMANDA RENEE RENSLOW (’12 English), 36, February 29, 2024, Oakland, California.

FACULTY AND STAFF


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Did you know $28 from each WSU license plate supports student scholarships? The program raised over $640,00 in scholarships just last year!

Learn more at alumni.wsu.edu/WSUplate
EXPLAINING ECONOMICS ON TIKTOK HAS MADE CHRIS CLARKE A BIT FAMOUS.

Famous in the way that noted economists repost the Washington State University assistant professor’s short videos. National media call for quotes when they’re writing about economic matters. And famous enough that one of his students told him, “Yeah, my mom watches you on TikTok.”

While Clarke (‘20 PhD Econ.) says that’s all great, it’s not the point.

“I engage with the general public because my goal is to listen,” he says. “They know their economic experience and I don’t know their economic experience.”

Clarke uses TikTok to understand what people are talking about, worried about, or interested in. Then he creates short videos to bring context and even answers from an economics angle. They’re highly produced, with graphics and “stitched” content that adds his commentary to other TikTok videos. That last technique is especially educational.

For instance, last year a TikToker got a lot of attention claiming economic conditions in 2023 were worse than during the Great Depression. Clarke says he felt compelled to counter that “megaviral” message. “I put together some numbers that showed it was nonsense,” he says.

It’s a lot. But it’s worth it because of the educational mission of a public university, Clarke says.

“I think our role is knowledge dissemination, educating as many people as possible,” he says. “My number one goal is public education—to take economics, which is an incredibly valuable topic that affects every one of us, and put it into a format that’s easily digestible.”
Each year, thousands of Cougs have their photos taken with the iconic bronze statue of Butch that greets fans and visitors near the entrance of Gesa Field on the WSU Pullman campus.

Known as Cougar Pride, the statue was generously commissioned by Gary Schneidmiller in 2008 and commemorates Butch’s Den, the site where live cougar mascots lived from 1927 until 1978. Two renowned Spokane artists, Mike Fields and his father, Chester, created the regal cougar that looks ready to pounce at a moment’s notice.

The plaque below the statue pays tribute to the history of the live cougar mascot era and honors Schneidmiller’s parents, Manuel and Gladys Schneidmiller.

Now, more than a decade after he gifted the statue, Schneidmiller has brought Cougar Pride sculptures to WSU Tri-Cities (spring 2023), WSU Spokane (spring 2024), WSU Vancouver (spring 2024), and WSU Everett (summer 2024).

“Gary’s gift is an incredible gesture exemplifying his passion for WSU,” said Mike Connell, vice president for Advancement and CEO of the WSU Foundation.

If you would like to support the statues, please consider a gift to a campus excellence fund.
DEAR READER:

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The Fall issue each year—like the one you’re reading—will continue to mail to most alumni.

The Winter and Spring issues will be automatically sent to alumni who have donated $10 or more in the last two years, as well as WSU Alumni Association members, paid subscribers, and some non-alumni donors.

The Summer issue will continue to be sent exclusively to WSU Alumni Association members and paid subscribers.

How to receive the magazine

If you wish to receive all issues, you can join the WSU Alumni Association: alumni.wsu.edu

To receive the Fall, Winter, and Spring issues, please consider giving $10 or more to WSU. For Winter 2024, please donate by October 1. Donations can be to any program or department. magazine.wsu.edu/give-WSU

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